

## APPENDIX F – DISPOSAL WELL APPLICATIONS

*Submission of disposal well application, Form UIC-2 COM SWD, Form UIC-2 SFI COM, or Form UIC-43; if applicable (Section 519.C.6)*

### *Disposal Well Application*

Form UIC-2 COM SWD for the Riemer Calhoun No. 001 and Riemer Calhoun No. 002, New Wells, is included in this section.

*Strike and dip geologic cross-sections at a minimum of a two mile radius (Section 519.C.6)*

Strike and dip geologic cross-sections at a minimum of a two-mile radius included in this section.



## Memorandum

Date: 3/20/2019

To: Stephen Olivier – LDNR / Office of Conservation, Environmental Division

From: Charlie Reynolds – ALTEC Oil & Gas Div. Manager / Geologist

Subject: PA Prospect Corporation (P5603) / Class II Commercial SWD Well

Reimer Calhoun SWD No. 001

Section 27, Township 13 North, Range 11 West

Red River-Bull Bayou Field (7651), Red River Parish, LA

The Appendix F – UIC 2 COMM SWD APPLICATION has been submitted to the Injection & Mining Division of the Louisiana Department of Natural Resources Office of Conservation for Technical Review.

A handwritten signature in blue ink, appearing to be "CR", is written above a horizontal line.

Charlie Reynolds  
Oil and Gas Division Manager / Geologist

A handwritten date "4/1/19" in blue ink is written above a horizontal line.

Date



## Memorandum

Date: 3/20/2019

To: Stephen Olivier – LDNR / Office of Conservation, Environmental Division

From: Charlie Reynolds – ALTEC Oil & Gas Div. Manager / Geologist

Subject: PA Prospect Corporation (P5603) / Class II Commercial SWD Well

Reimer Calhoun SWD No. 002

Section 27, Township 13 North, Range 11 West

Red River-Bull Bayou Field (7651), Red River Parish, LA

The Appendix F – UIC 2 COMM SWD APPLICATION has been submitted to the Injection & Mining Division of the Louisiana Department of Natural Resources Office of Conservation for Technical Review.

A handwritten signature in blue ink, appearing to be "C. Reynolds", is written above a horizontal line.

Charlie Reynolds  
Oil and Gas Division Manager / Geologist

4/1/19

Date



JOHN BEL EDWARDS  
GOVERNOR

State of Louisiana  
DEPARTMENT OF NATURAL RESOURCES  
OFFICE OF CONSERVATION

THOMAS F. HARRIS  
SECRETARY

RICHARD P. IEYOUB  
COMMISSIONER OF CONSERVATION

August 17, 2020

Melissa Anderson  
PA Prospect Corporation (P5603)  
P.O. Box 785  
Columbus, MT 59019

Re: Application Nos. 40928 and 40930 / Class II Commercial SWD Wells  
Reimer Calhoun SWD Well No. 001 and Reimer Calhoun SWD Well No. 002  
Red River-Bull Bayou Field, Red River Parish

Dear Ms. Anderson:

This Office has completed the technical review of each referenced application and deemed them to be administratively complete. You must provide the Office of Conservation/Environmental Division one original and one copy of the documentation as approved by the Injection & Mining Division and as required in Section F of the Office of Conservation/Environmental Division document, *Commercial Facility & Transfer Station Permit Application Checklist*. Please include a copy of this letter with that submittal.

Please be advised, injection will only be permitted in distinct intervals exhibiting sufficient porosity and permeability to support radial flow of injected fluids as demonstrated by the open-hole logs and the analyses of the sidewall cores.

Please contact Steve Lee at (225) 342-5569 if you have any questions.

Yours very truly,

Richard P. Ieyoub  
Commissioner of Conservation

Stephen H. Lee, Director  
Injection & Mining Division

RPI:SHL

F: Injection\Engineering\Letter Library\Commercial\Env Adm Complete\Applications 40928 and 40930.docx



JOHN BEL EDWARDS  
GOVERNOR

State of Louisiana  
DEPARTMENT OF NATURAL RESOURCES  
OFFICE OF CONSERVATION

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Commissioner of Conservation

  
Stephen H. Lee, Director  
Injection & Mining Division

RPI:SHL

F:\Injection\Engineering\Letter Library\Commercial\Env Adm Complete\Applications 40928 and 40930.docx



February 12, 2019

Mr. Gary Snellgrove  
Office of Conservation  
Injection and Mining Division  
P. O. Box 94275  
Baton Rouge, Louisiana 70804-9275

RE: PA Prospect Corporation (P5603)  
Commercial E and P Waste Treatment Facility  
Reimer Calhoun SWD No. 001  
Red River-Bull Bayou Field, Red River Parish, Louisiana  
APN SA03428

Dear Mr. Snellgrove,

ALTEC Environmental Consulting, LLC, on behalf of our client, has enclosed an original and one (1) copy of a Commercial Saltwater Disposal Well Application for the above referenced commercial facility, including all required fees and attachments.

Thank you for your assistance in processing this application. If you need any additional information, please feel free to contact me at (318) 687-3771.

Sincerely,

A handwritten signature in cursive script that reads "Charles Reynolds".

Charles Reynolds, Geologist/Agent



## COMMERCIAL SALTWATER DISPOSAL WELL PERMIT APPLICATION

**MAILING ADDRESS:**  
 OFFICE OF CONSERVATION  
 INJECTION & MINING DIVISION  
 P.O. BOX 94275-CAPITOL STATION  
 BATON ROUGE, LA 70804-9275

**PHYSICAL ADDRESS:**  
 OFFICE OF CONSERVATION  
 INJECTION & MINING DIVISION  
 617 N. THIRD ST., SUITE 817  
 BATON ROUGE, LA 70802

**UIC-2 COM SWD**

PLEASE READ APPLICATION PROCEDURES TYPE ONLY

TYPE ONLY

1. APPLICATION TO: <input checked="" type="checkbox"/> DRILL NEW COM SWD WELL <input type="checkbox"/> RE-DRILL FOR COM SWD DISPOSAL (SN. _____) <input type="checkbox"/> CONVERT TO COM SWD WELL <input type="checkbox"/> RE-PERMIT COM SWD WELL	2. CONSERVATION ORDER NO.      ORDER 29-B
3. OPERATOR NAME: PA Prospect Corporation ADDRESS: P.O. Box 785 CITY, STATE, ZIP: Columbus, MT 59019 EMAIL: energyequity@yahoo.com	4. OPERATOR CODE: P5603 5. PHONE: 406-322-9951      FAX: 406-322-9956

**WELL INFORMATION**

6. PROPOSED WELL NAME AND NUMBER: REIMER CALHOUN SWD    No. 001	7. SERIAL NO. (CONVERSION & RE-PERMIT ONLY) New Well
8. FIELD: RED RIVER-BULL BAYOU (7651)	9. PARISH: Red River      ( 41 )
10. SEC. "27"      TWP. "13N"      RNG. "11W"	
11. LEGAL LOCATION DESCRIPTION (FROM PLAT) Located 1199 feet from the South line and 1224 feet from the East line of Section 27, Township 13 North, Range 11 West, Red River Parish, Louisiana.	

12. GEOGRAPHIC COORDINATE SYSTEM (NAD27) LATITUDE:    32° DEG      04' MIN      52.153" SEC LONGITUDE:  93° DEG      28' MIN      43.202" SEC	STATE PLANE COORDINATES (LAMBERT, NAD 27) NORTH ZONE <input checked="" type="checkbox"/> SOUTH ZONE <input type="checkbox"/> X: 1696887.048      Y: 515885.017
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**WELL CONSTRUCTION INFORMATION**

13. CASING SIZE (IN.)	HOLE SIZE (IN.)	CASING WEIGHT	DEPTH SET		SACKS CEMENT	TYPE CEMENT		TOP OF CEMENT
			TOP (FT.)	BOTTOM (FT.)				
9 5/8	12 1/4	36.0	0	1000	400	Class A		Surface
7	8 3/4	26.0	0	5200	130	965	50/50 POZ    PREMIUM	Surface
							1.57 cu.ft./sk    1.08 cu.ft./sk	

14. TUBING: <input checked="" type="checkbox"/> STEEL <input type="checkbox"/> OTHER (IDENTIFY)      SIZE: 4 1/2 IN.      DEPTH (FT.): 4780
15. PACKER: <input checked="" type="checkbox"/> TENSIONAL <input type="checkbox"/> PERMANENT <input type="checkbox"/> COMPRESSIONAL      MAKE: Baker MODEL: AD-1      DEPTH SET (FT.): 4780
16. PLUG-BACK DEPTH (FT.): 5200      17. DRILLED-OUT DEPTH (FT.): 5300      18. TOTAL DEPTH OF WELL (FT.): 5300

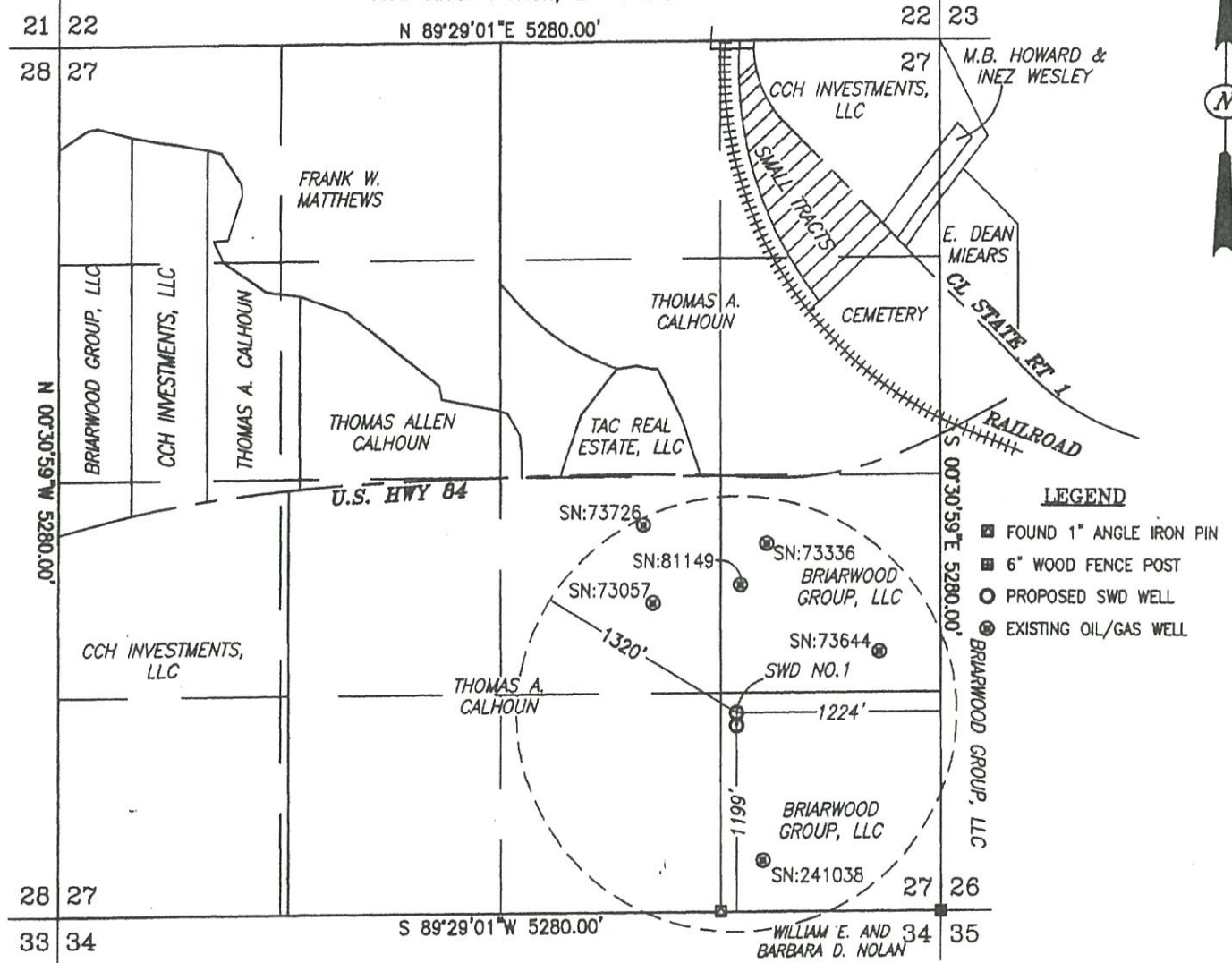
**PROPOSED INJECTION INTERVAL INFORMATION**

19. DEPTH OF PROPOSED INJECTION ZONE (MD IN FT.): TOP: 4887      BOTTOM: 5140	20. INJECTION FORMATION(S): RODESSA
21. INJECTION THROUGH: <input checked="" type="checkbox"/> Perforations <input type="checkbox"/> Open Hole <input type="checkbox"/> Screen	22. PROPOSED PERFORATED OR OPEN HOLE INTERVAL (MD IN FT.): TOP: 4900      BOTTOM: 4950

PRESSURE CALCULATION DATA	
23. INJECTION RATE (BARRELS/MINUTE): NORMAL: 10.4 BPM      MAXIMUM: 17.4 BPM	24. INJECTION FLUID EXPECTED TEMPERATURE ( °F ): SUMMER: 85 °F      WINTER: 80 °F
25. INJECTION FORMATION PROPERTIES: <input checked="" type="checkbox"/> ESTIMATED <input type="checkbox"/> MEASURED    IF MEASURED, LIST SOURCE: ___ PERMEABILITY: 1000      MILLIDARCYS (MD)      PEROSITY: 30%    PERCENT:	
26. CALCULATE THE MASIP BASED ON THE FRACTURE GRADIENT OF THE: <input checked="" type="checkbox"/> INJECTION FORMATION (SEE ATTACHMENT 7) <input type="checkbox"/> CONFINING FORMATION (SEE ATTACHMENT 7)	
OTHER INFORMATION	
27. DESCRIBE THE CONTIGENCT PLANS FOR SALTWATER DISPOSAL WHEN THE WELL IS DOWN: In the event the well/facility is down, water will be transported to another facility owned and operated by PA PROSPECT CORPORATION (P5603)	
28. IS THE PROPOSED WELL LOCATED ON INDIAN LANDS UNDER THE JURISDICTION OR PROTECTION OF THE FEDERAL GOVERNMENT?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
29. IS THE PROPOSED WELL LOCTED ON STATE WATER BOTTOMS OR OTHER LANDS OWNED OR UNDER JURISDICTION OF THE STATE?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
AUTHORIZED AGENT	
30. AGENT OR AUTHORIZED TO ACT FOR THE OPERATOR DURING PROCESSING OF THIS APPLICATION.  THE SIGNATURE BY THE OPERATOR CERTIFYING THIS APPLICATION WILL AUTHORIZE THIS AGENT OR CONTACT TO SUBMIT ADDITIONAL INFORMATION AS REQUESTED AND TO GIVE ORAL STATEMENTS IN SUPPORT OF THIS APPLICATION.  Name: CHARLIE REYNOLDS Company: ALTEC ENVIRONMENTAL CONSULTING, LLC Address: P. O. BOX 17867, SHREVEPORT, LA 71138-0867 Phone: (318) 687-3771 email: CHARLIE.REYNOLDS@ALTECENV.COM	
WRITTEN CORRESPONDACE SHOULD BE SENT TO (CHOOSE ONE): <input type="checkbox"/> Operator <input checked="" type="checkbox"/> Authorized Agent	
CERTIFICATION BY OPERATOR	
<i>I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my personal knowledge or inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.</i>	
31. NAME (PRINT)      Jerry Nelson	32. TITLE (PRINT)      President
33. SIGNATURE 	34. DATE      6-17-20



Section 27, Township 13 North, Range 11 West,  
Red River Parish, Louisiana.



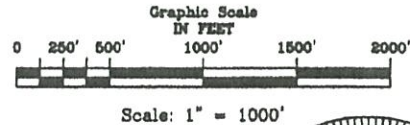
PLAT SHOWING LOCATION

**PA PROSPECT CORPORATION ----- REIMER CALHOUN SWD NO. 001**

Located 1199 feet from the South line and 1224 feet from the East line of Section 27,  
Township 13 North, Range 11 West, Red River Parish, Louisiana.

Latitude = 32°04'52.15372"North  
Longitude = 93°28'43.20208"West  
Latitude = 32.08115381° North  
Longitude = 93.47866724° West  
NAD 27  
X = 1,696,887.048  
Y = 515,885.017  
State Plane Grid, LA North 1701

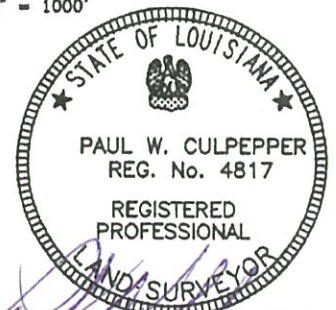
Latitude = 32°04'52.73270"North  
Longitude = 93°28'43.83498"West  
Latitude = 32.08131464° North  
Longitude = 93.47884305° West  
NAD 83  
X = 2,977,672.943  
Y = 576,592.577  
State Plane Grid, LA North 1701



Ground Elevation = 137.57  
(NAVD 88)

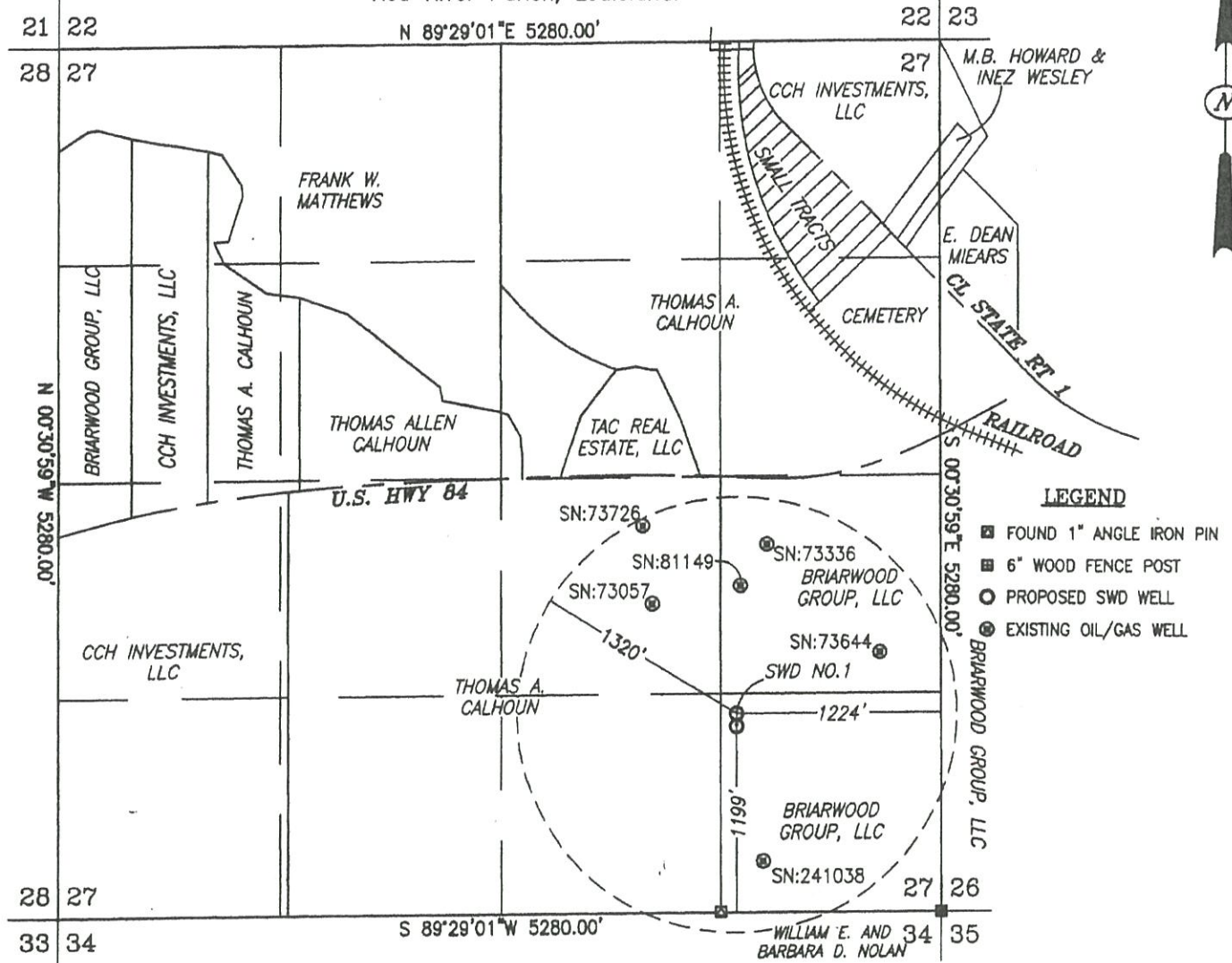
DATE: FIELD: JANUARY 29, 2019  
DRAWING: JANUARY 30, 2019  
REVISED: OCTOBER 30, 2019

*I, Paul W. Culpepper, Professional Land Surveyor, certify that the well location depicted and described in this plat was stated and surveyed in the field by me or under my direction with accuracy and precision to the nearest foot. I have properly examined the survey and plat, and have determined that it meets the minimum standards of practice for land surveying in the State of Louisiana.*



SCALE: 1" = 1000'	<b>Landmark Land Surveying, Inc.</b> 114 Pearl St., Minden, Louisiana (318) 371-9100 18-224C
LOCATION: 27-13-11	
DATE: JANUARY 30, 2019	

Section 27, Township 13 North, Range 11 West,  
Red River Parish, Louisiana.



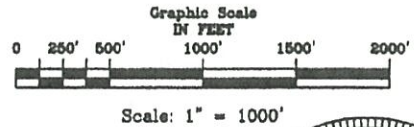
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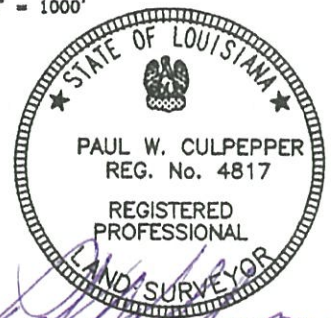
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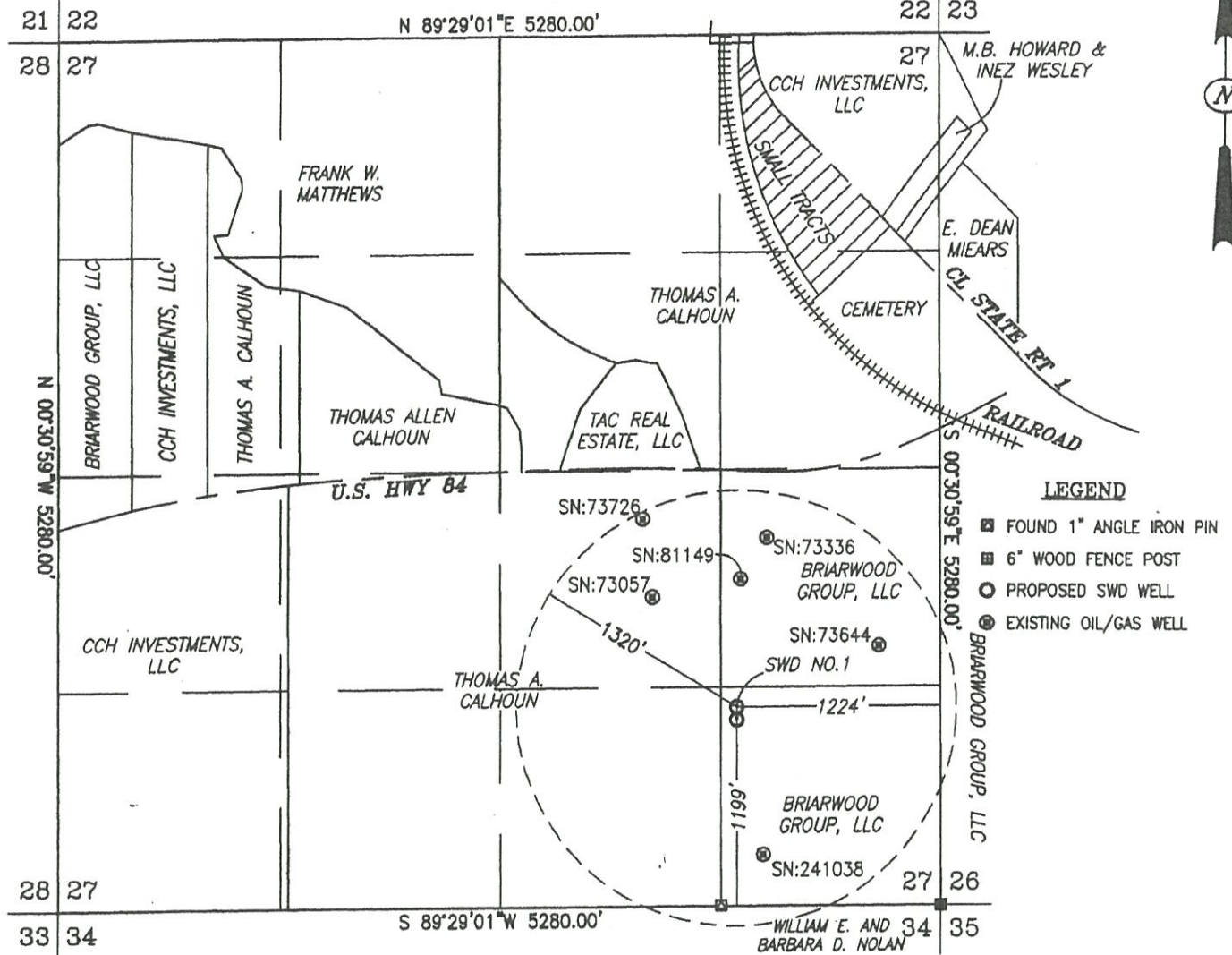
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LOCATION: 27-13-11	
DATE: JANUARY 30, 2019	

Section 27, Township 13 North, Range 11 West,  
Red River Parish, Louisiana.



- LEGEND**
- FOUND 1" ANGLE IRON PIN
  - 6" WOOD FENCE POST
  - PROPOSED SWD WELL
  - ⊙ EXISTING OIL/GAS WELL

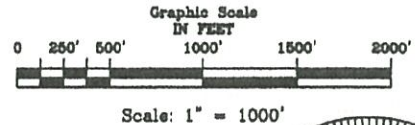
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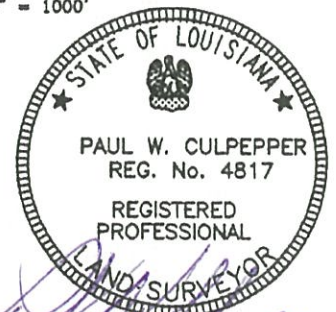
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LOCATION: 27-13-11
DATE: JANUARY 30, 2019

**Landmark Land Surveying, Inc.**  
114 Pearl St., Minden, Louisiana  
(318) 371-9100  
18-224C



933

73726

73057

7283

18247

4433

81149

73336

241038

73644

PROPOSED REIMER CALHOUN SWD NO. 001

1/4 MILE RADIUS

27

26


34

ATTACHMENT 2A  
AREA OF REVEIW

LOCATION

PA PROSPECT CORPORATION (P9603)  
REIMER CALHOUN SWD NO. 001  
NEW WELL  
SECTION 24 T13N R11W  
RED RIVER-BULL BAYOU FIELD  
RED RIVER PARISH, LOUISIANA

LEGEND

-  NEW WELL
-  DIRECTIONAL WELL
-  PERMIT EXPIRED
-  P&A DRY HOLE
-  P&A PRODUCER
-  P&A PRODUCER - OIL
-  P&A DRY PRODUCER - GAS & CONDENSATE



PROJECT NO. SA03428

SCALE 1" = 350'

PAGE 1 DRAWN BY JKW

SHEET 1 DATE 02/07/2019

A - 8.5 X 11



FRESHWATER WELL LIST

A DILIGENT SEARCH WAS MADE TO LOCATE ALL FRESHWATER WELLS WITHIN A 1/4 MILE RADIUS OF THE PROPOSED WELL AND NO WELLS WERE LOCATED

A DILIGENT SEARCH WAS MADE TO LOCATE ALL FRESHWATER WELLS WITHIN A 1/4 MILE RADIUS OF THE PROPOSED WELL AND THE FOLLOWING WELLS WERE LOCATED

OWNER	WELL NAME	TYPE	STATUS CODE	TOTAL DEPTH	LOCATION	
					LATITUDE	LONGITUDE

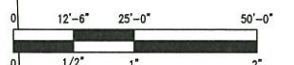
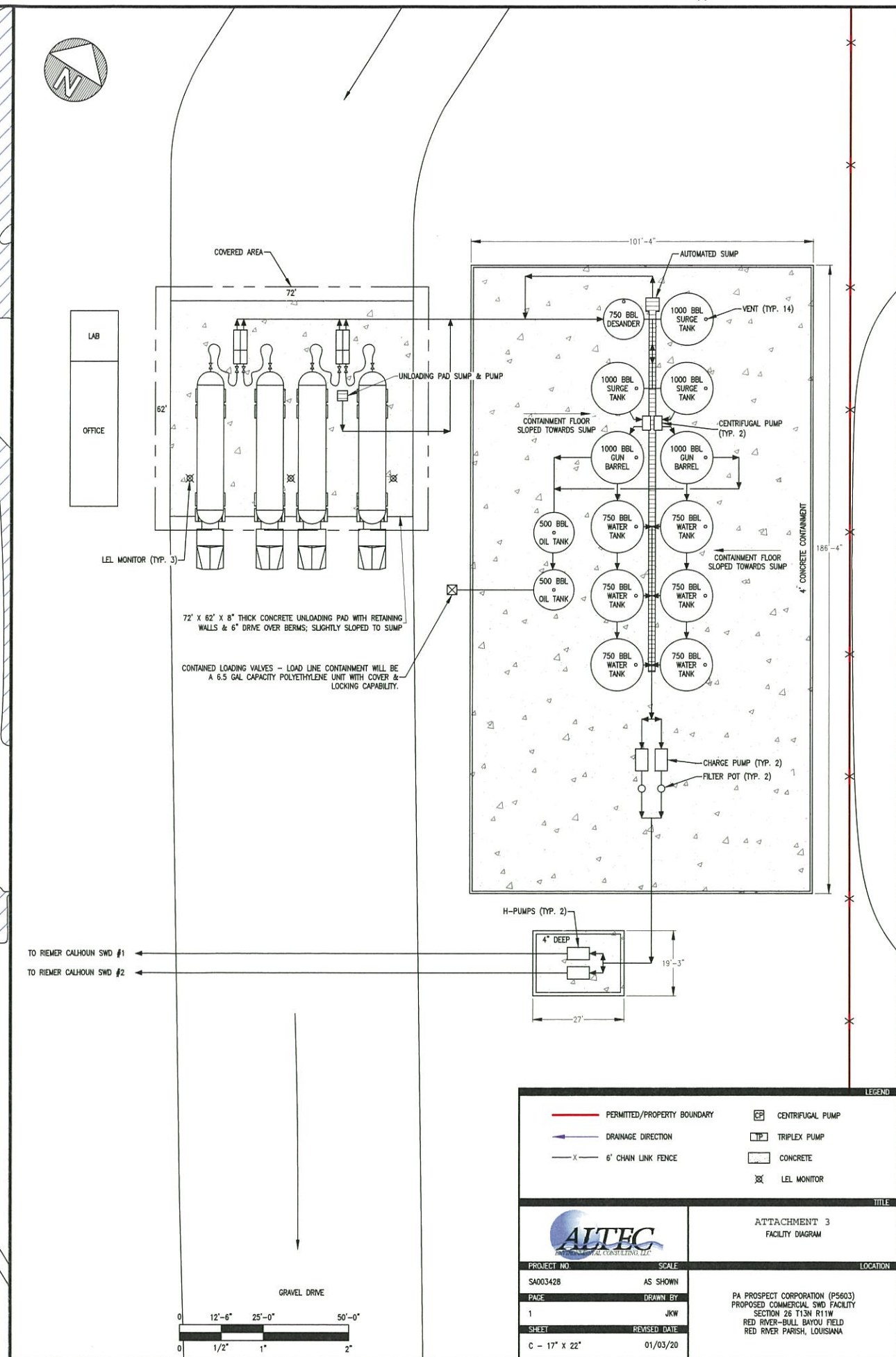
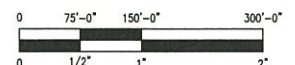
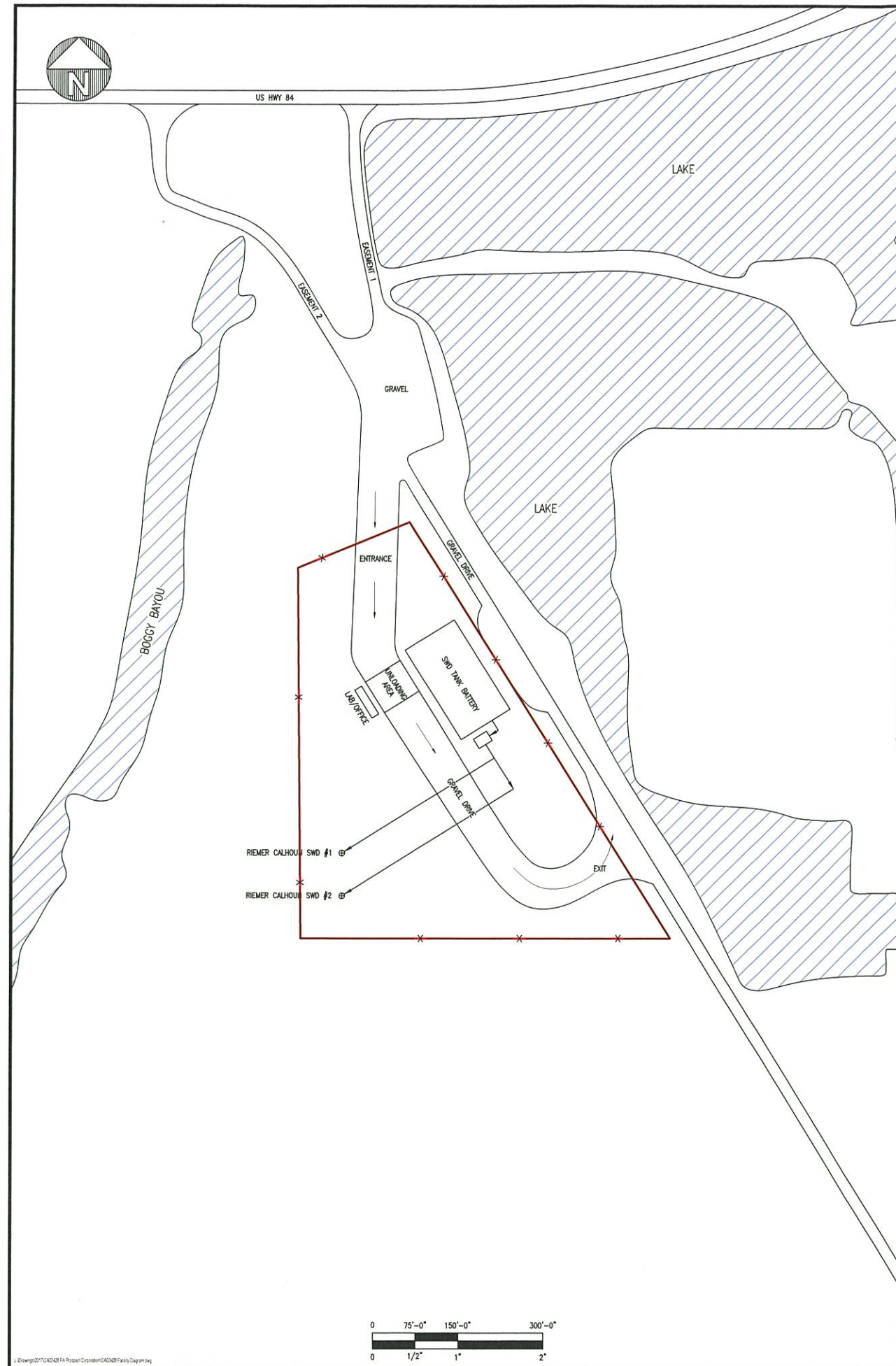
\*Type of Well: PUBLIC SUPPLY, DOMESTIC (supplies one or a few homes), INDUSTRIAL (including commercial), LIVESTOCK, IRRIGATION (including catfish & crawfish farming), MONITORING, RIG SUPPLY, HEAT PUMP SUPPLY, OBSERVATION (by a qualified agency or company), AQUIFER DEWATERING, RECOVERY (of contaminants), other (describe).

\*\*Status of Well: ACTIVE (used at least once a month), STANDBY, INACTIVE (but useable with minor work or effort), ABANDONED (but not plugged).

# Water Wells By LATITUDE / LONGITUDE Report

Latitude 32.0613889 Longitude -91.4788889 Radius Ft 1320 MSG Found 0 records

Well Distance Ft	SECTION	TOWNSHIP	RANGE	PARISH NAME	PARISH_NUM	LOCAL_WELL_#	WELL_USE	DESCRIPTION	WELL_STAT	OWNERS_US_NUM	OWNERS_NUM	OWNERS_NAME	DRILLERS_NAME	WELL_DEPTH	CASING_DIAMETER	DATE_MPLETDR	WATER_LEVEL	DATE_ASSURD	GEOLOGIC_UNIT	LATITUDE	LONGITUDE
------------------	---------	----------	-------	-------------	------------	--------------	----------	-------------	-----------	---------------	------------	-------------	---------------	------------	-----------------	--------------	-------------	-------------	---------------	----------	-----------

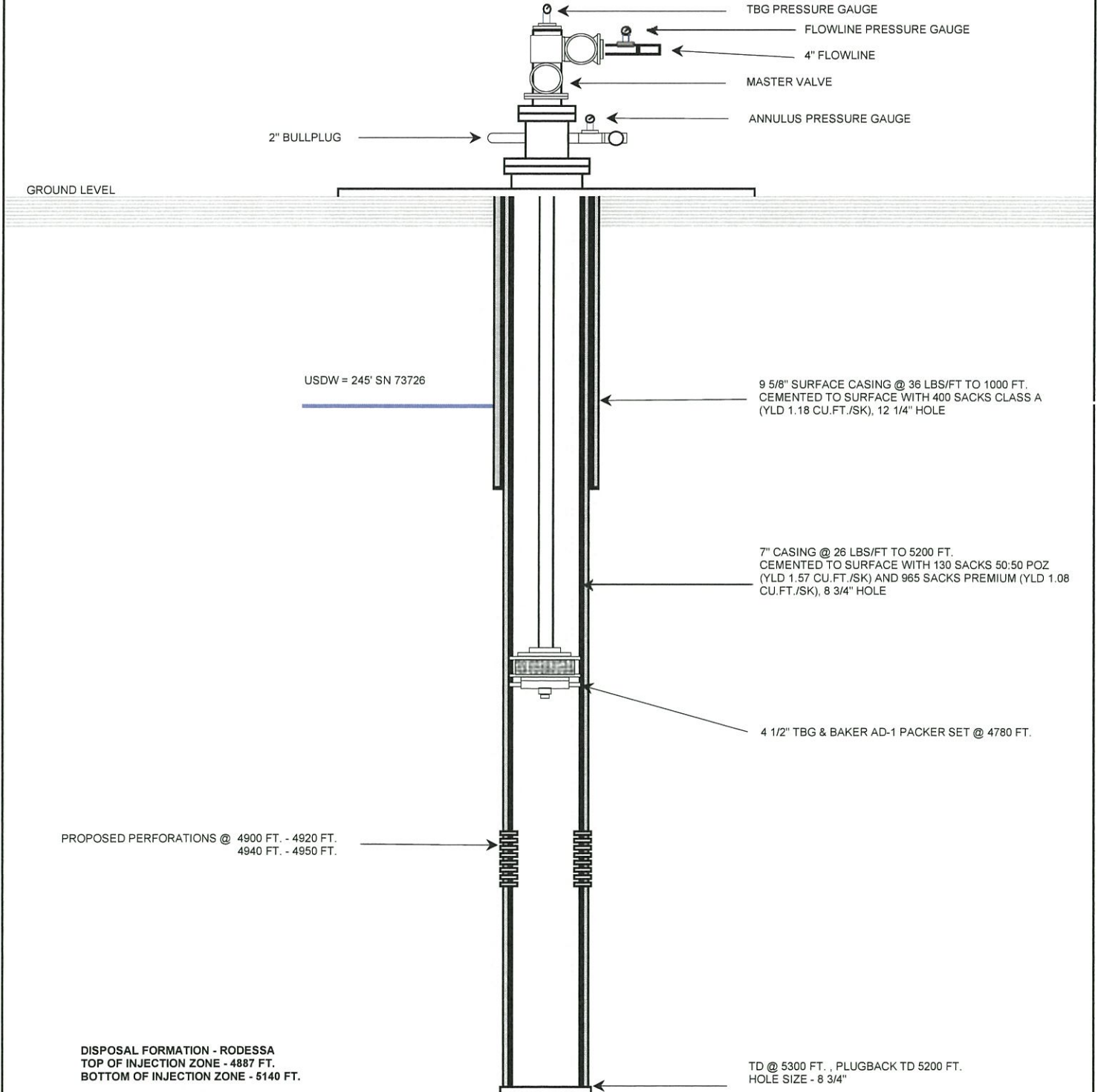


LEGEND	
	PERMITTED/PROPERTY BOUNDARY
	DRAINAGE DIRECTION
	6' CHAIN LINK FENCE
	CENTRIFUGAL PUMP
	TRIPLEX PUMP
	CONCRETE
	LEL MONITOR

TITLE		LOCATION	
		ATTACHMENT 3 FACILITY DIAGRAM	
PROJECT NO. SA003428	SCALE AS SHOWN	PA PROSPECT CORPORATION (P5603) PROPOSED COMMERCIAL SWD FACILITY SECTION 26 T13N R11W RED RIVER-BULL BAYOU FIELD RED RIVER PARISH, LOUISIANA	
PAGE 1	DRAWN BY JKW		
SHEET C - 17" X 22"	REVISED DATE 01/03/20		



PA PROSPECT CORPORATION (P5603)  
 REIMER CALHOUN SWD NO. 001  
 SECTION 27, TOWNSHIP 13 NORTH, RANGE 11 WEST  
 RED RIVER-BULL BAYOU FIELD (7651)  
 RED RIVER PARISH, LOUISIANA



	PROJECT	SCALE	PA PROSPECT CORPORATION (P5603) REIMER CALHOUN SWD NO. 001 (PROPOSED) SECTION 27, TOWNSHIP 13 NORTH, RANGE 11 WEST RED RIVER-BULL BAYOU FIELD (7651) RED RIVER PARISH, LOUISIANA	ATT. 4A REIMER CALHOUN SWD NO. 001 PROPOSED WELL SCHEMATIC DIAGRAM Revised 6-17-2020
	SA03428	NTS		
	PAGE	DRAWN BY		
	1	CR		
	SHEET	DATE		
A	2/12/2019			

PA Prospect Corporation (P5603)  
Reimer Calhoun SWD NO. 001, New Well  
Section 27, Township 13 North, Range 11 West  
Red River-Bull Bayou Field (7651)  
Red River Parish, Louisiana

### WORK PROGNOSIS

1. Notify Louisiana Department of Natural Resources prior to spud and 24 hours prior to cementing all casing strings.
2. Install location sign - make sure sign is in compliance with Louisiana Department of Natural Resources regulations and denotes the well to be an SWD.
3. Move in rig and equipment and rig up.
4. RIH with 12 1/4 in. bit drilling to 1000 ft. Circulate and condition hole. R/U Wireline and run Open Hole/Triple Combo Log (GR/SP/RES) from TD to Surface.
5. Run 9 5/8 in. surface casing, 36 lbs/ft. to 1000 ft. and cement to surface with 400 sacks Class A (Yld 1.18 cu.ft./Sack). WOC 12 hrs. Pressure test casing to a minimum of 1000 psi with not more than 5% loss in pressure in a 30 min. time period to determine casing integrity. Complete and sign Form CSG-T, submit originals upon completion of well (IMD requires the original).
6. Install and Test BOP according to Injection and Mining regulations; LAC 43:XIX.111.A & LAC 43:XIX.111.C.
7. RIH with 8 3/4 in. bit drilling to 5300 ft. Circulate and condition hole. R/U Wireline and run open hole w/triple combo log (GR/SP/RES) from TD through Surface Casing Shoe. Shoot Percussion Sidewall Cores in Proposed Injection Intervals.
8. Run 7 in. longstring casing, 26 lbs/ft. to 5200 ft. and cement to surface with 130 sacks 50:50 POZ (Yld 1.57 cu.ft./Sack) and 965 sacks Premium (Yld 1.08 cu.ft./Sack). WOC 12 hrs. Pressure test casing to a minimum of 1000 psi with not more than 5% loss in pressure in a 30 min. time period to determine casing integrity. Complete and sign Form CSG-T, submit originals upon completion of well (IMD requires the original).
9. Run CBL/VDL/GR from total depth to surface casing. Evaluate cement bond log for possible squeezes. The log must show a minimum of 11 continuous feet of not less than 60% bond across from the first isolating shale immediately above the top of the proposed injection zone and must show evidence of cement below the bottom of the injection zone. The CBL will be submitted to Injection and Mining, Engineering Department prior to perforating and setting the packer in the well to verify adequate cement isolation. If no additional cementing work is required, proceed with constructing the well. If additional cement work is required, perforate and squeeze as required by Injection and Mining Division and re-run the cement bond log after the squeeze. Submit the CBL to the Injection and Mining Division for approval before completing the well.

PA Prospect Corporation (P5603)  
 Reimer Calhoun SWD NO. 001, New Well  
 Section 27, Township 13 North, Range 11 West  
 Red River-Bull Bayou Field (7651)  
 Red River Parish, Louisiana

10. With approval from IMD, R/U Wireline & perforate injection interval from 4900 – 4950 ft. with 6 spf. After perforating; Contact appropriate CES Agent to schedule the fluid level measurement for purposes of calculating the formation pressure. Take a measurement of the reservoir pressure of the injection zone. This pressure can be obtained by direct measurement from a downhole pressure gauge or by taking a static fluid level reading in the well and calculating the pressure at the perforations. This is reported on the UIC-WH1 and is now required in order to receive a permit to inject.
11. Pick up Baker model AD1 packer and go in hole with 4 1/2” tubing & set packer on tension at 4780’. The packer must be set at a depth that is equal to or deeper than the cement in the wellbore that is bonded to the first isolating shale immediately above the approved injection zone. (No higher than 150’ above TOZ)
12. Contact appropriate CES Agent to schedule the Mechanical Integrity Pressure Test (MIPT) and fluid level measurement for purposes of calculating the formation pressure. Pressure test tubing/casing annulus to 400 psi for 30 minutes. A Conservation Enforcement Specialist must be present to witness the test.
13. Submit all required paperwork within 20 days of completing the well as stated in the “Permit to Construct” and wait on “Permit to Inject” approval from IMD before injection and disposal of any fluids.
14. Monitor injection pressure and volumes to stay within the guidelines of the permit.

**Louisiana Office of Conservation – Injection & Mining Division: Cement Bond Logging Guidelines:**

<ol style="list-style-type: none"> <li>1. Gamma-ray curve</li> <li>2. Casing Collar locator</li> <li>3. Travel Time on the 3-foot receiver</li> <li>4. 0-100 mv Amplitude curve</li> </ol>	<ol style="list-style-type: none"> <li>5. X5 or X10 Amplified Amplitude curve (Important)</li> <li>6. Variable Density log (VDL) or Waveform (for pipe within a pipe)</li> <li>7. A free pipe section</li> <li>8. The most recent shop calibration &amp; date</li> </ol>
--	--

# Gulf States Environmental Laboratories

222 Spring St. Shreveport, La. 71101 · 800-256-6110 · 318-220-9067 · Fax 318-221-3296  
LELAP CERTIFICATION # 02082

**Client:** ALTEC ENVIRONMENTAL CONSULTANTS  
10100 WOOLWORTH RD.  
KEITHVILLE, LA 71047

Page 1 of 1

**Report Date:** 02/18/19  
**Sample ID:** SN 240814 SEPERATOR @ WELLHEAD  
**Project Name:** GRAND BAYOU COMMERCIAL SWD  
**Collected By:** CLIENT  
**Time/Date Collected:** 1515 02/04/19  
**Date Received:** 02/04/19

## ANALYTICAL RESULTS

**GSEL ID#:** 107998

### GENERAL CHEMISTRY

**Sample Matrix:** WATER

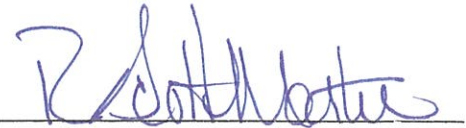
Analyte:	Result	Units	Qualifier	Reporting Limit	Dil. Factor	Method	Time/Date Analyzed	Analyst
TDS	169,836	mg/L		10.0		SM 2540C	1015 - 02/05/19	MR
CHLORIDE	90,455	mg/L		10.0	10	H 8225	1415 - 02/13/19	MR
SPECIFIC GRAVITY	1.105					ASTMD 1298-99	1722 - 02/07/19	MR
TEMPERATURE	20.1	°C				EPA 170.1	1722 - 02/07/19	MR
pH	4.86	SU				EPA 150.1	1625 - 02/04/19	CY

\*The above results relate only to the items tested.

\*Test reports meet all requirements of LAC 33:1

\*This test report shall not be reproduced except in full, without the written approval of the laboratory.

Approval: \_\_\_\_\_



U - Analyte not on current Scope of Accreditation  
A - Analyte detected in the associated method blank  
B - Estimated value between the detection limit and the reporting limit  
C - Estimated value exceeds the calibration curve  
D - Surrogate recovery outside advisable QC limits

TNTC - Too numerous to count  
E - Surrogate recovery unreportable due to dilution  
F - Matrix interference  
G - Method specific criteria not met  
H - Some of the QC was outside the normal range

01

ATTACHMENT 5



# Gulf States Environmental Laboratories

222 Spring Street; Shreveport, LA 71101 Phone: (318) 220-9067 Fax: (318) 221-3296  
LELAP Certification No.: 02083

## SAMPLE RECEIPT FORM

Client: Altec GSEL# 107998

Received By/Date and Time: CO 2-4-19 16:20

Sample Brought in By: Client  GSEL  Other

Temperature: 11.4°C Thermometer ID: IR-1

Logged in By: CC. Dell

- |  |   |                             |   |
|--|---|-----------------------------|---|
| 1. Shipping container/cooler arrive in good condition?   | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Not Present <input type="checkbox"/>              |
| 2. Was sufficient ice used? (If appropriate)             | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |
| 3. Were custody seals intact on sample bottles?          | Yes <input type="checkbox"/>            | No <input type="checkbox"/> | Not Present <input checked="" type="checkbox"/>   |
| 4. Were custody papers (Chain of Custody) with samples?  | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |
| 5. Were custody papers properly filled out?              | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Not Present <input type="checkbox"/>              |
| 6. Were custody papers signed by the client?             | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |
| 7. Were custody papers signed by the lab?                | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |
| 8. Did all sample containers arrive in good condition?   | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |
| 9. Were all container labels complete?                   | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |
| 10. Were correct containers used for requested analysis? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |
| 11. Did all container labels agree with custody papers?  | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |
| 12. Was sufficient sample sent for requested analysis?   | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |
| 13. Were all samples received within holding times?      | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |
| 14. Do VOA vials have zero headspace?                    | Yes <input type="checkbox"/>            | No <input type="checkbox"/> | None Received <input checked="" type="checkbox"/> |
| 15. Was preservation checked upon receipt?               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Initials <u>CO</u>                                |
| *VOA preservation checked after sample analysis.         |   |                             |   |
| *Oil and Grease and TOC checked during sample analysis.  |   |                             |   |
| 16. Was the correct preservative used?                   | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |

Non-Conformance Issues: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

GSEL Rep/Contact Date & Time: \_\_\_\_\_

Person Contacted: \_\_\_\_\_

Client Instructions: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

## MASIP CALCULATION REQUEST

(Check the box next to the appropriate request and complete the requested information)

The applicant requests to calculate the Maximum Authorized Surface Injection Pressure (MASIP) **based on the fracture gradient of the injection formation**. As described in the Intra-Office Policy Statement No. IMD 1999-03, the MASIP will be calculated not to exceed 90% of the calculated fracture pressure of the injection zone based on the Eaton's Correlation of 9 ppg formation fluid. The following information has been provided:

- The specific gravity of the injection fluid is 1.105, as reported in Attachment 6 - Fluid Source Analyses.
- The top of the proposed perforations is 4900 feet, as given in item No. 21 of the Form UIC-2 SWD application.
- An area of review of **one-quarter (1/4) mile** (1,320 feet) has been conducted and all of the wells located within a radius have been identified in Attachment 2B. Each well in the AOR will be evaluated for deficiencies. If deficiencies exist, the well(s) will be properly plugged and abandoned or remediated using another approved corrective action plan to protect the USDW.

The signature provided at the bottom of this page certifies the applicant understands this requirement.

The applicant requests to calculate the MASIP **based on the fracture gradient of the confining formation**. As described in Intra-Office Policy Statement No. IMD-GS-09, the MASIP will be calculated by limiting the pressure at the depth of injection to 75% the pressure needed to fracture the confining formation. The following information has been provided:

- The specific gravity of the injection fluid is \_\_\_\_\_, as reported in the fluid source analyses (Attachment 6).
- The top of the proposed perforations, \_\_\_\_\_ feet, as given in item No. 22 of the Form UIC-2 SWD application.
- The geomechanical data of the confining zone above the proposed injection zone  has been  will be derived from one of the following methods:
  - Subsurface acquisition and testing of the confining beds,
  - Wireline logging to generate mechanical properties,
  - Leak-off testing of the confining beds using fluid with timed velocity, or
  - Other acceptable procedure:

The results of the proposed procedure  have been submitted as Attachment 7A,  will be submitted prior to issuance of a permit to inject for the proposed well.

- An area of review of **one-half (1/2) mile** (2,640 feet) has been conducted and all of the wells located within the radius have been identified in Attachment 2B. Each well in the AOR will be evaluated for deficiencies. If deficiencies exist, the well(s) will be properly plugged and abandoned or remediated using another approved corrective action plan to protect the USDW.

- The proposed top of the injection zone is approximately 4850 feet from the base of the USDW. If the difference between the top of the proposed injection zone and base of the USDW is less than 1,000 feet, then the MASIP will be based on a surface pressure gradient not to exceed 0.25 psi/ft., calculated with respect to the top of the proposed perforations or the top of the open-hole completion.

- The surface casing is set at least 100 feet below the base of the USDW.

- A groundwater monitoring plan has been submitted as Attachment 7B and includes all the following provisions:

- Installation of a monitoring well or wells, that is screened or perforated at the base of the USDW.
- Collection of fluid from the monitoring well or wells, which will be sampled by a third party and analyzed by a LDEQ, LEAP accredited laboratory on a quarterly basis for:
  - Chlorides
  - BTEX
  - Temperature
  - Total dissolved solids
  - Specific gravity
  - pH
- Collection of a fluid level in the monitoring well or wells on a monthly basis.
- Submission of a quarterly report, which includes all laboratory analytical data and fluid level measurements. The report will be submitted to the Injection and Mining Division within 30 days of the end of the quarter in which the sampling and measurements were performed. It is understood that failure to file reports or delinquent filings will result in enforcement actions.

The signature provided below certifies the applicant understands this requirement.

OPERATOR'S SIGNATURE



DATE

2-6-19



Applications 40928 & 40930

PARISH RED RIVER  
 FIELD BULL BAYOU  
 WELL RIEMER CALHOUN  
 FEE NO. 9  
 COMPANY RIEMER CALHOUN

COMPANY RIEMER CALHOUN  
 WELL *WELL # 73726* RIEMER CALHOUN FEE  
 NO. 9

FIELD BULL BAYOU  
 LOCATION SEC. 27-T13N-R11W

PARISH RED RIVER  
 STATE LOUISIANA

OTHER SURVEYS  
*8-73726*

WELL LOCATION  
 2345' N &  
 1932' W of  
 SE Corner of Sec.  
 Elevation KB  
 DF  
 GL

MEASUREMENTS TAKEN FROM K.B. OR 5' ABOVE 89/8" CASING COLLAR

Run No.	1	2	3	4	5
First reading	2539				
Last reading	122				
Feet measured	2417				
Casing, Lone-Wells	122				
Casing, Driller	122				
Bottom, Lone-Wells	2540				
Bottom, Driller	2538				
Max. temp. °F	105				
Mud characteristics	@ 52 °F @ °F @ °F @ °F @ °F				
Resistivity	12.0				
Resist. BHT	6.1				
Nature	Native				
Density	9.2				
Viscosity	3.9				
Water Loss-cc 30 min.					
Mud Ph.					
It size	7 7/8"				
Short normal	16"				
Long normal	64"				
Lateral	216"				
g time	4.5 Min				
Recorded by	Harper P 23				
Witnessed by	Messrs. Lange & Calhoun				
Date	2-2-59				



REMARKS OR OTHER DATA

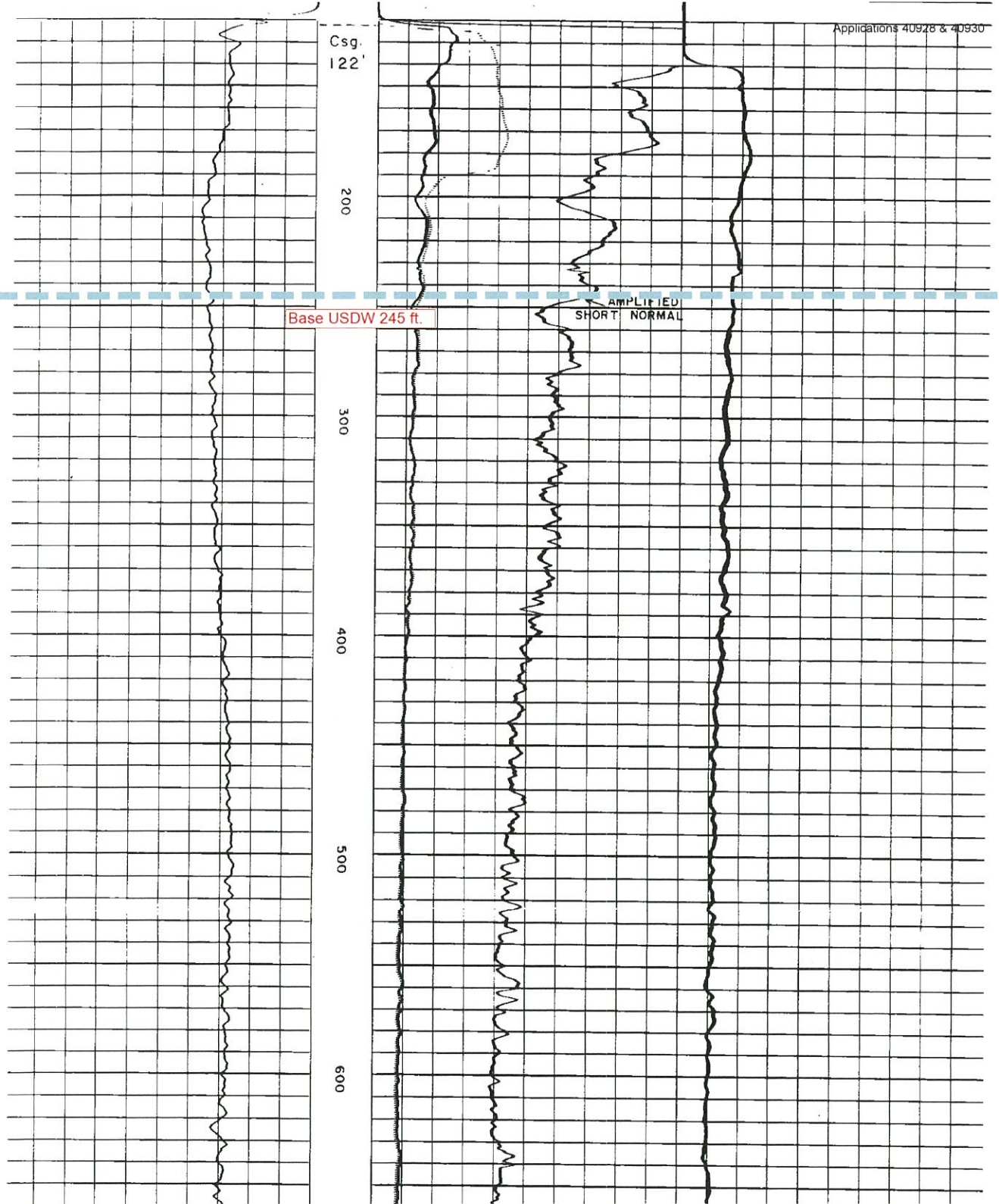
Mud Pit Sample probably Contaminated by Rain Water.

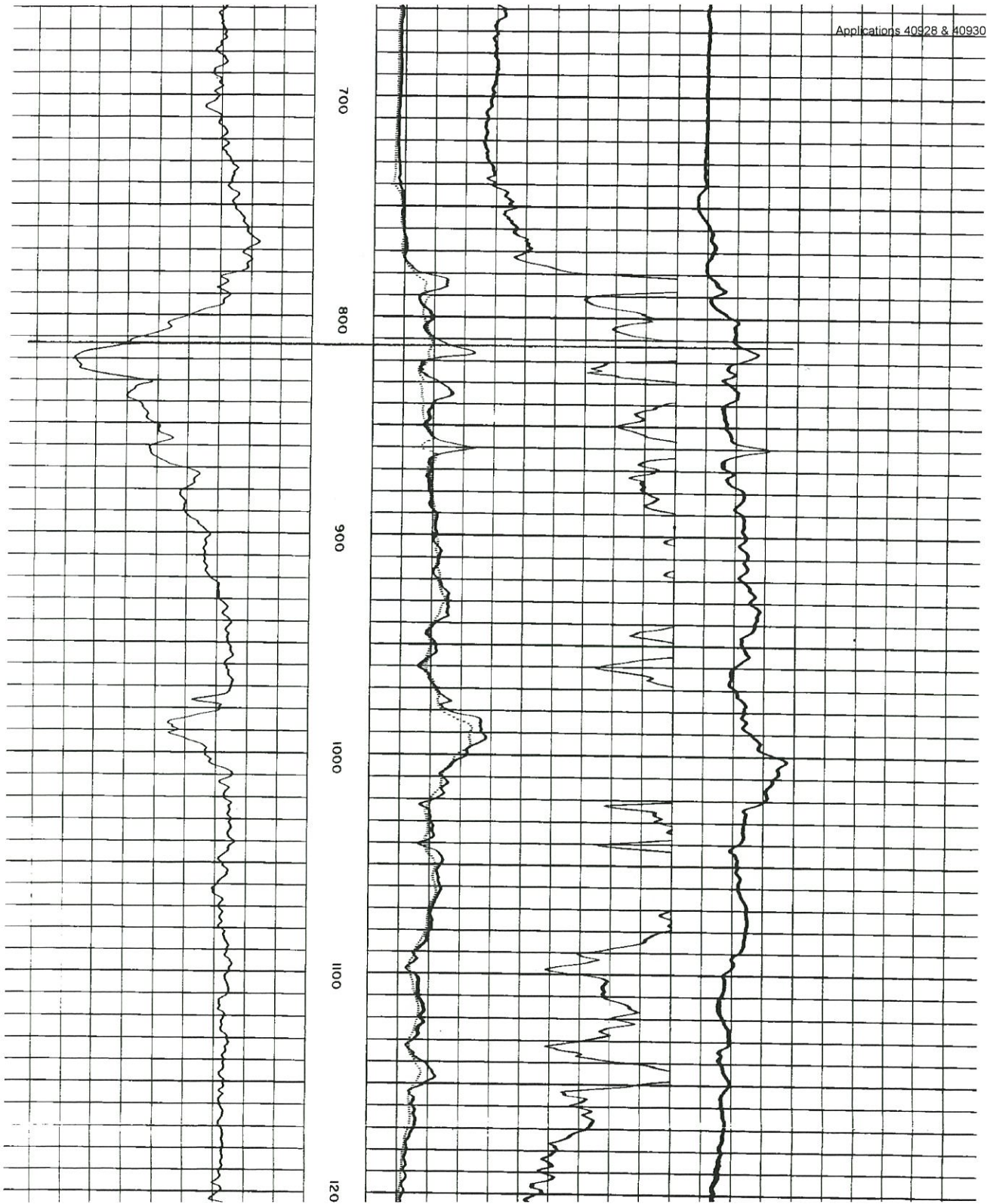
FILE NO. 7,146 73726 11

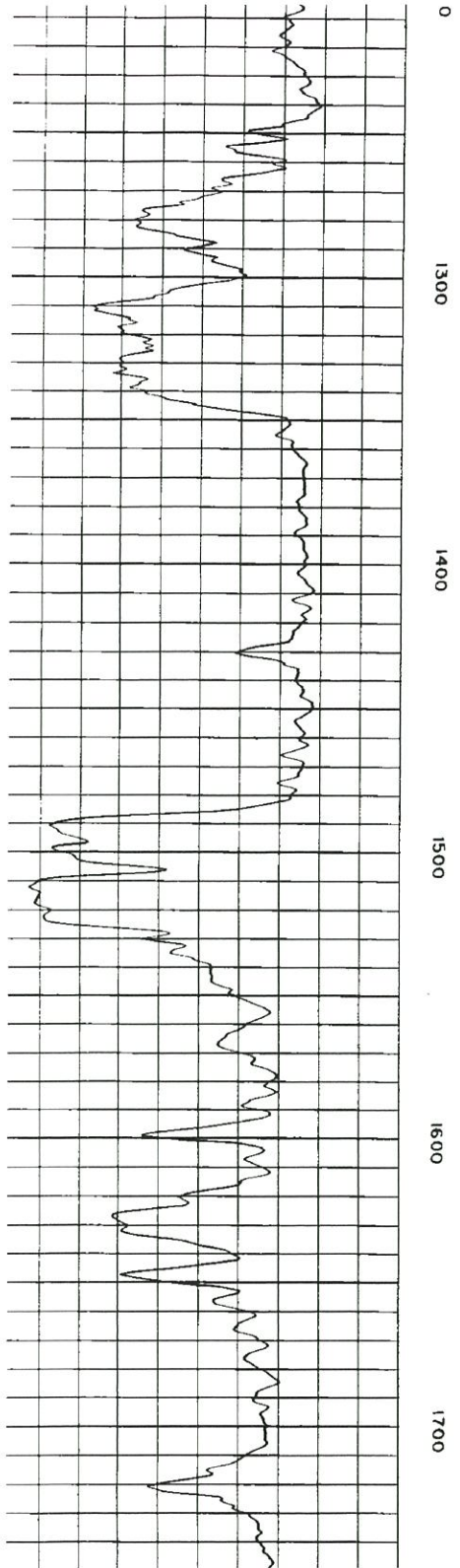
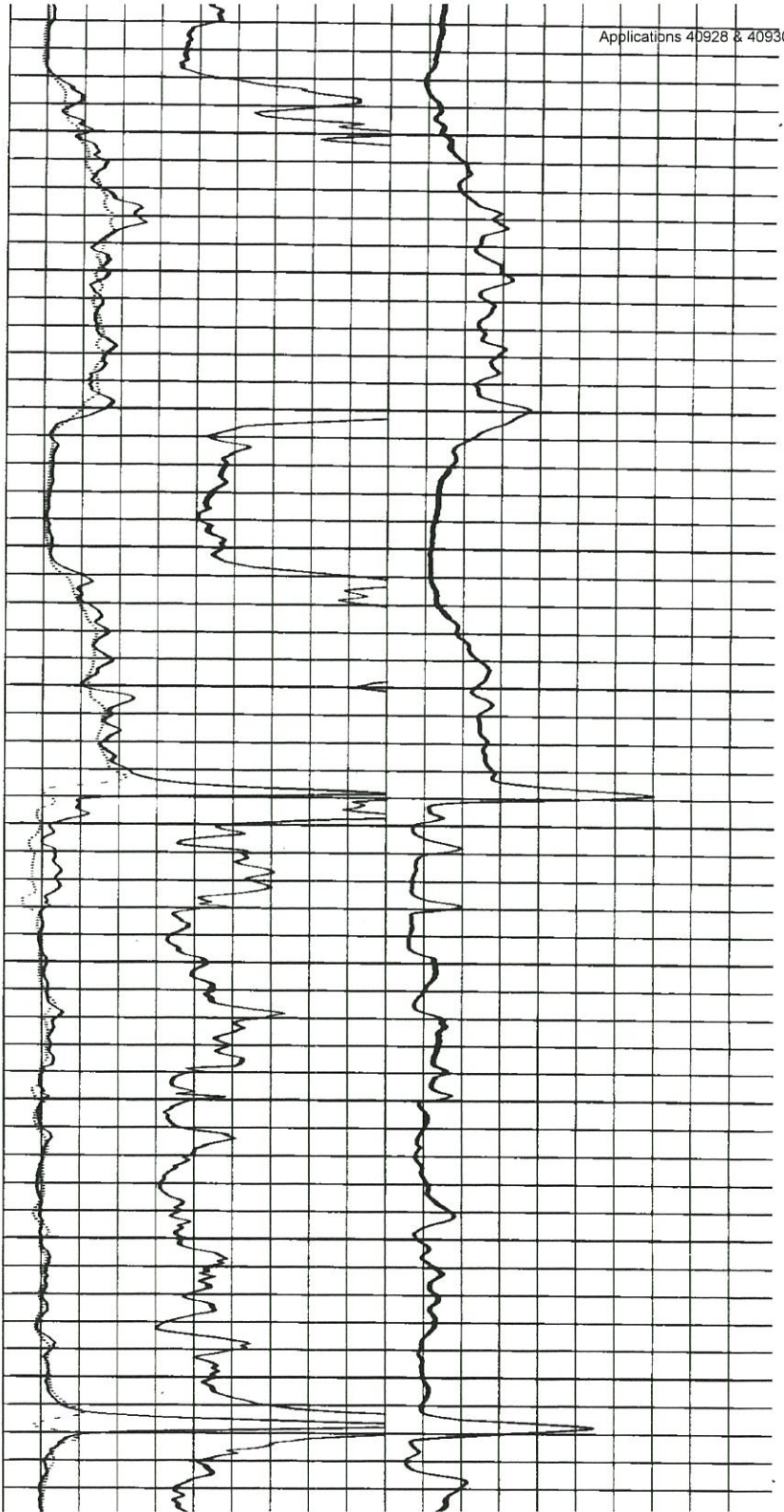
POTENTIAL MILLIVOLTS	Depth	RESISTIVITY OHM-METERS	
		RESISTIVITY OHM-METERS	RESISTIVITY OHM-METERS
		Short Normal AM-16"	Lateral AO-216"
	0	20	20
	0	200	200
	0	200	200
		Long Normal AM-64"	
	0	20	
		Amplified Short Normal	
	0	4	

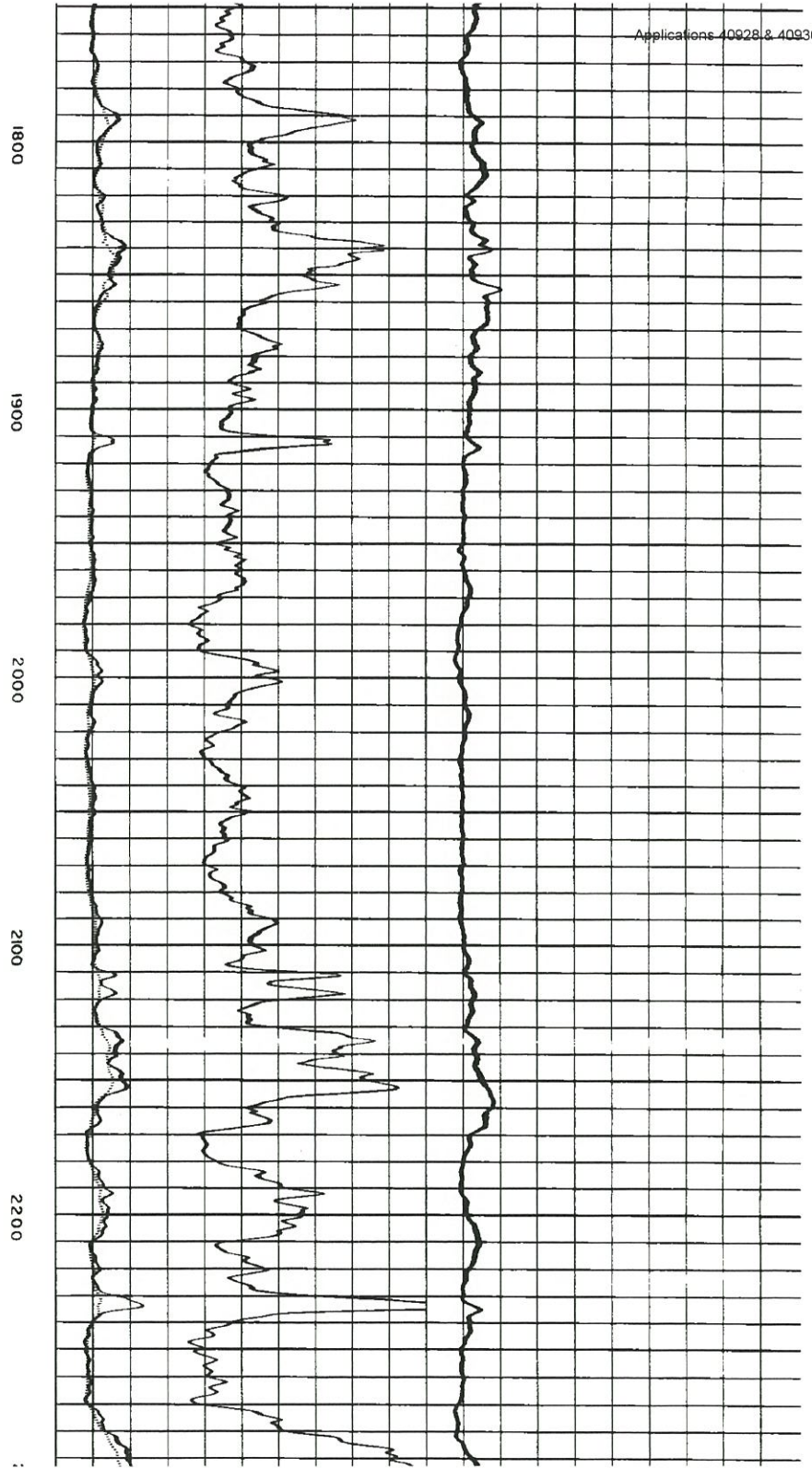
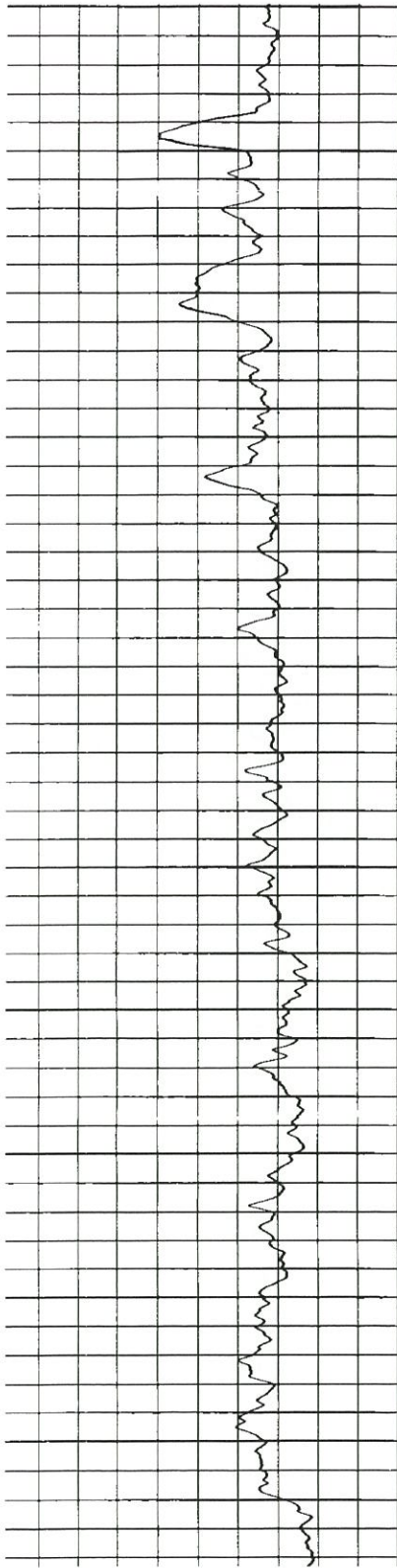
*122*  
*11*

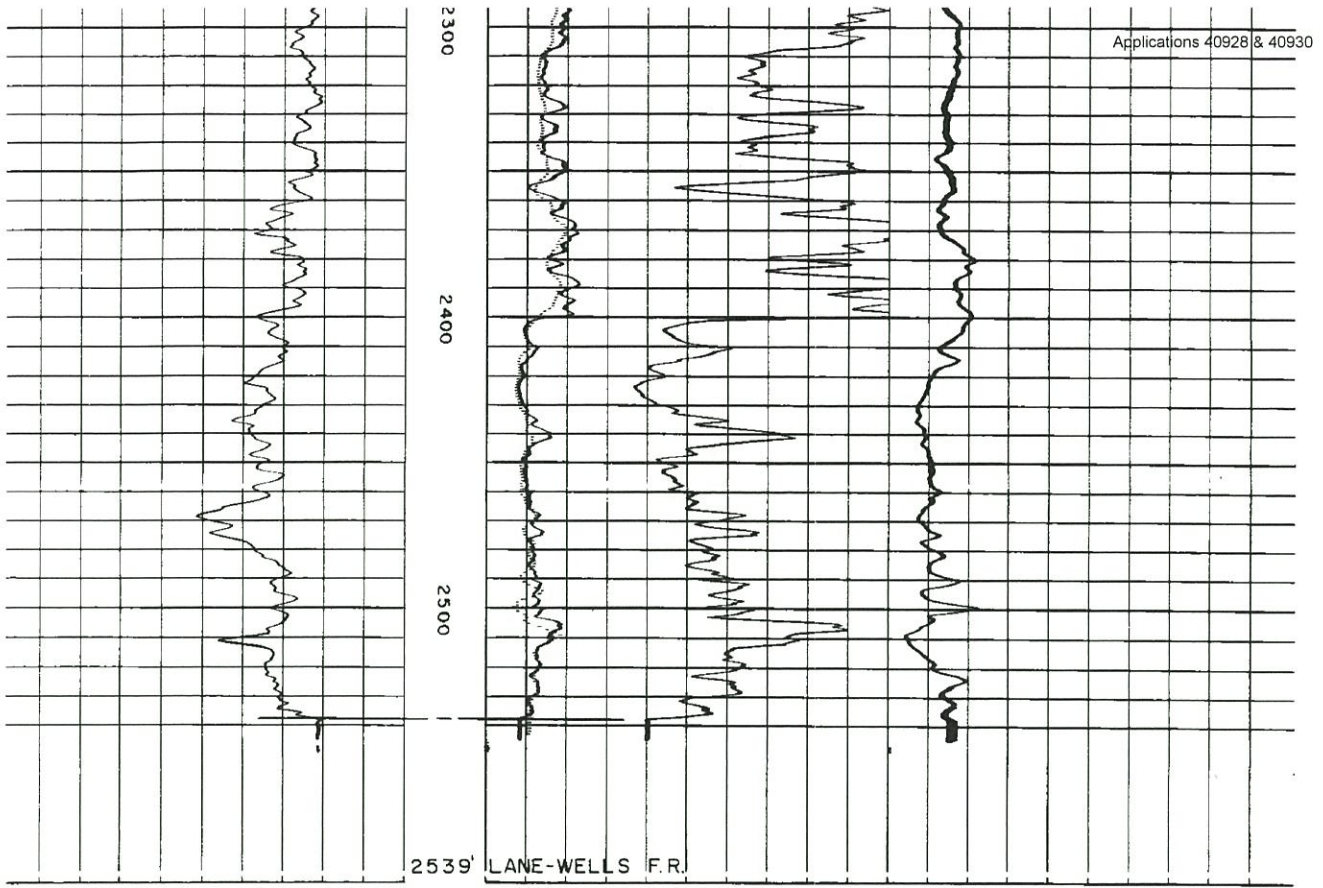












RIEMER CALHOUN  
RIEMER CALHOUN FEE NO. 9

**Confidential**  
 SN 232902  
 From: 7-18-06 (letter)  
 Until: 7-18-07

SIM - ANEUS TRIPLE  
 INDUCTION/MICRORESISTIVITY  
 DENSITY / NEUTRON LOG

**COMPANY ARK-LA-TEX ENERGY, LLC.**

WELL  
 FIELD

RCSR LLC #1  
 RED RIVER - BULL BAYOU  
 RED RIVER  
 LOUISIANA

COMPANY ARK-LA-TEX ENERGY, LLC.

WELL RCSR LLC #1  
 FIELD RED RIVER - BULL BAYOU  
 PARISH RED RIVER STATE LOUISIANA

Location 1895' FSL & 1975' FML  
 OF SEC 27  
 LAT: 32.08326N, LONG: 93.48598M

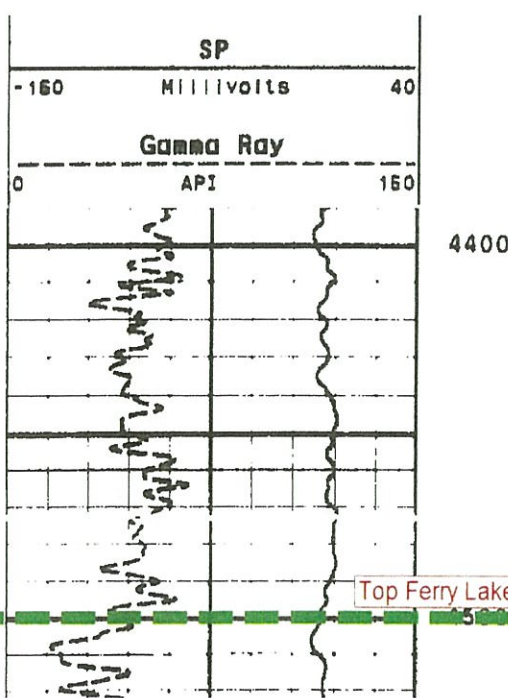
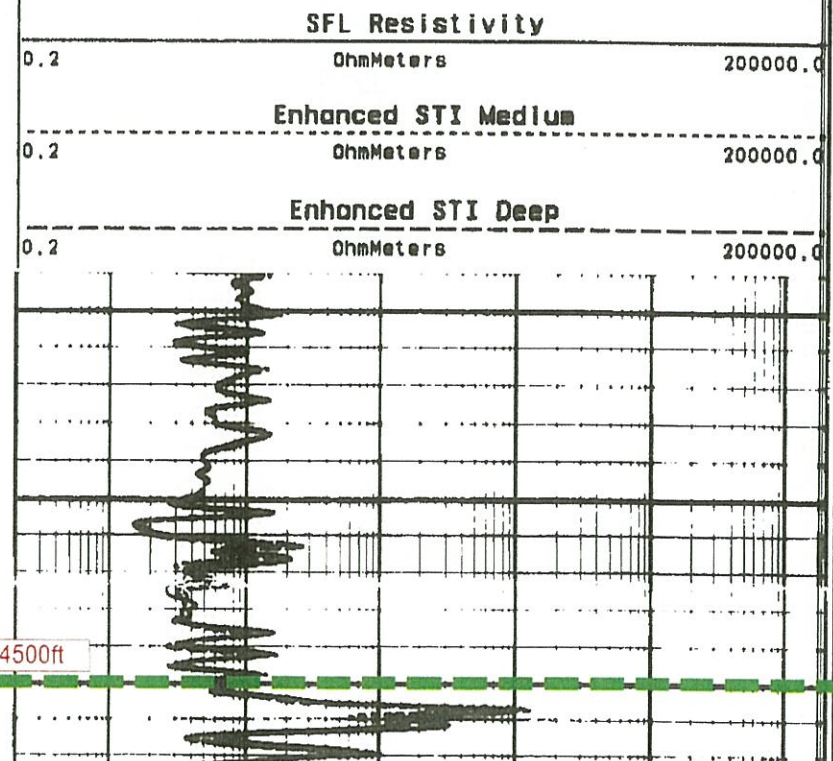
API 170812086  
 EC 27  
 TWP13N  
 S/N 232902  
 RGE11M

Area Datum S.L. 9. 12 Elev 137 ft  
 measured from 12 ft above  
 ment Case 7  
 ELEV. K.B. 149 ft  
 D.F. 148 ft  
 G.L. 137 ft

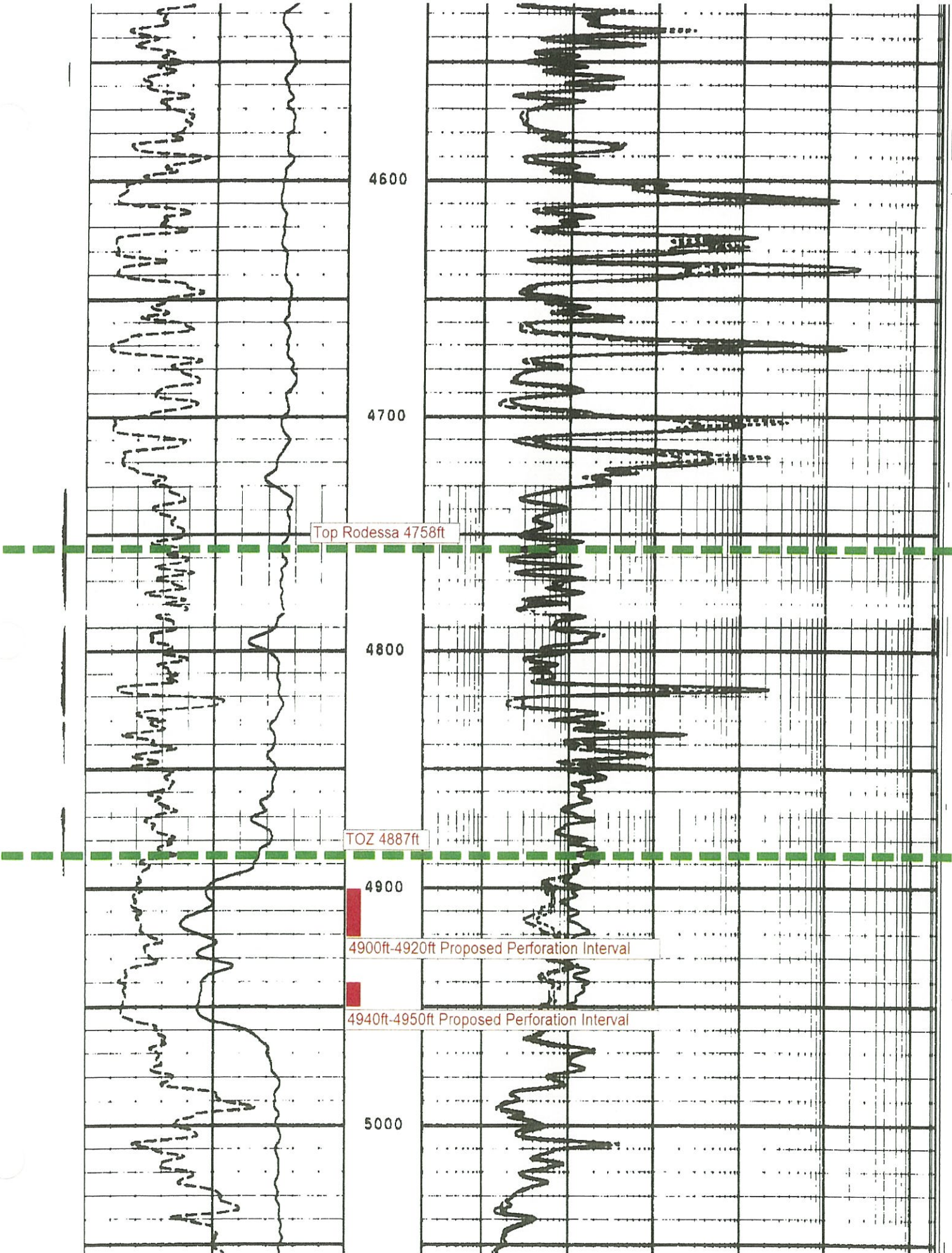
**RECEIVED**  
 JUL 24 2006  
 JUL 19 2006

OFFICE OF CONSERVATION  
 SHREVEPORT, LA

Date	IN-23	OPR	
Run No.	9212 ft.		
Bot. Drill	3201 ft.		
Loggng	9'64 ft.		
1st Reading			
2nd Reading			
LOG Interval	7335 ft.		
CS9 - Driller	8.625 in. @ 1809 ft.		
CS9 - Logger	1799 ft.		
Bit Size	7.875 in.		
Fluid Type	DISPERSED		
Dens. - Visc.	10.8 lba/gal 58 S		
PH Fluid Loss	9.7	10.0 cc	
Spm. Le Sevice	FIOSLINE		
Rm @ 1/2 hrs	0.5 ohm @ 80 of		
Rm @ 1 hr	0.4 ohm @ 80 of		
Rm @ 2 hrs	0.7 ohm @ 80 of		
Rm @ 4 hrs	0.2 ohm @ 235 of		
Rm @ 8 hrs	0.1 ohm @ 235 of		
Temp	06/26/06 - 0030 hrs.		
OPR	3 hrs.		
Unit	TYLER		
Recorded By	N. GUENO		
Mitessed By	J. SIMPSON		



Top Ferry Lake 4500ft



4600

4700

Top Rodessa 4758ft

4800

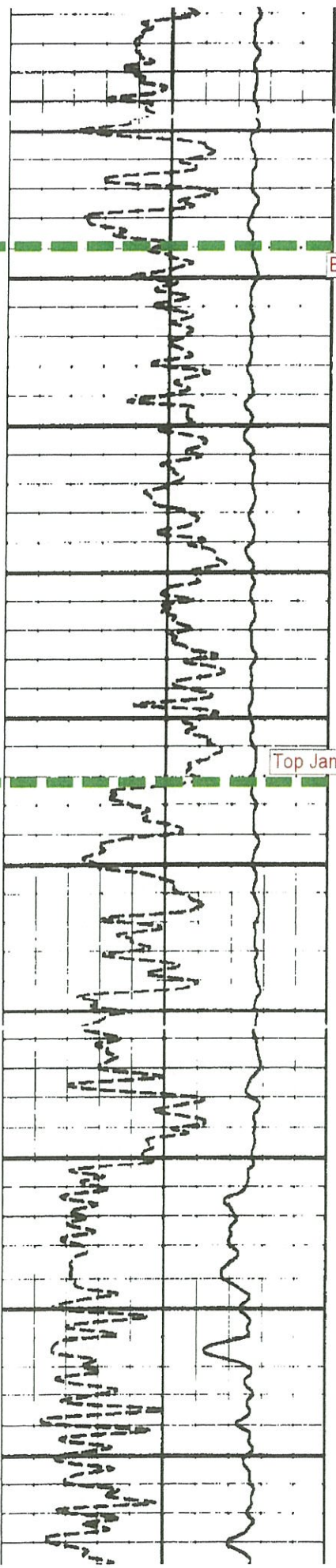
TOZ 4887ft

4900

4900ft-4920ft Proposed Perforation Interval

4940ft-4950ft Proposed Perforation Interval

5000



5100

BOZ 5140ft

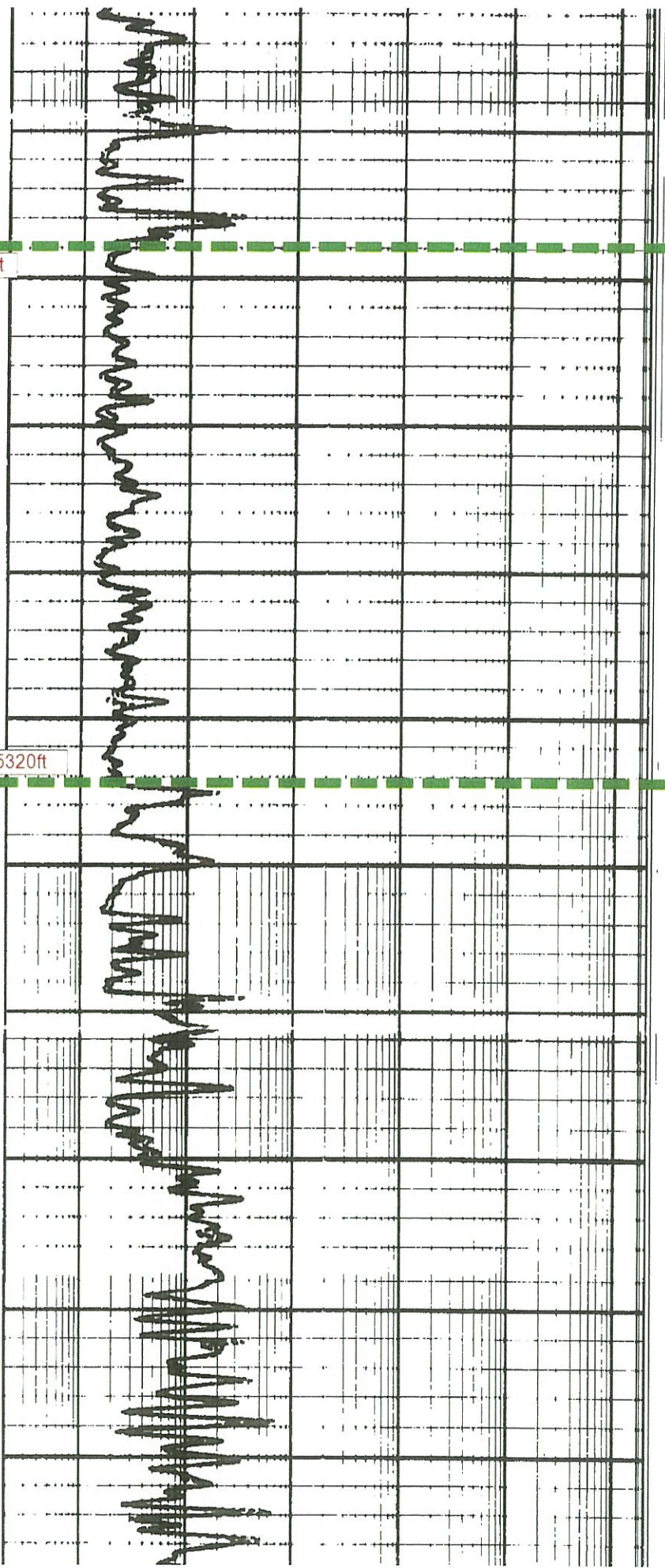
5200

5300

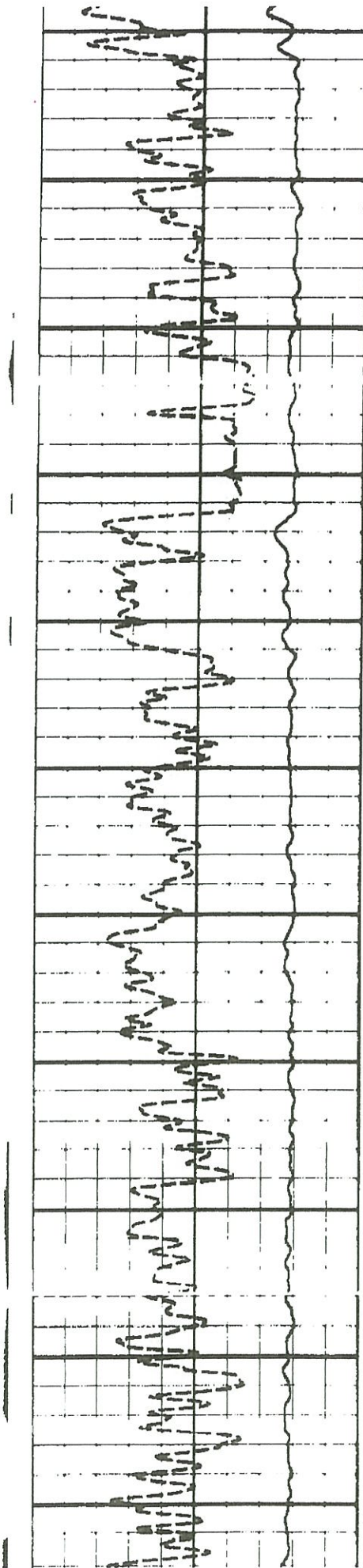
Top James Lime 5320ft

5400

5500







5600

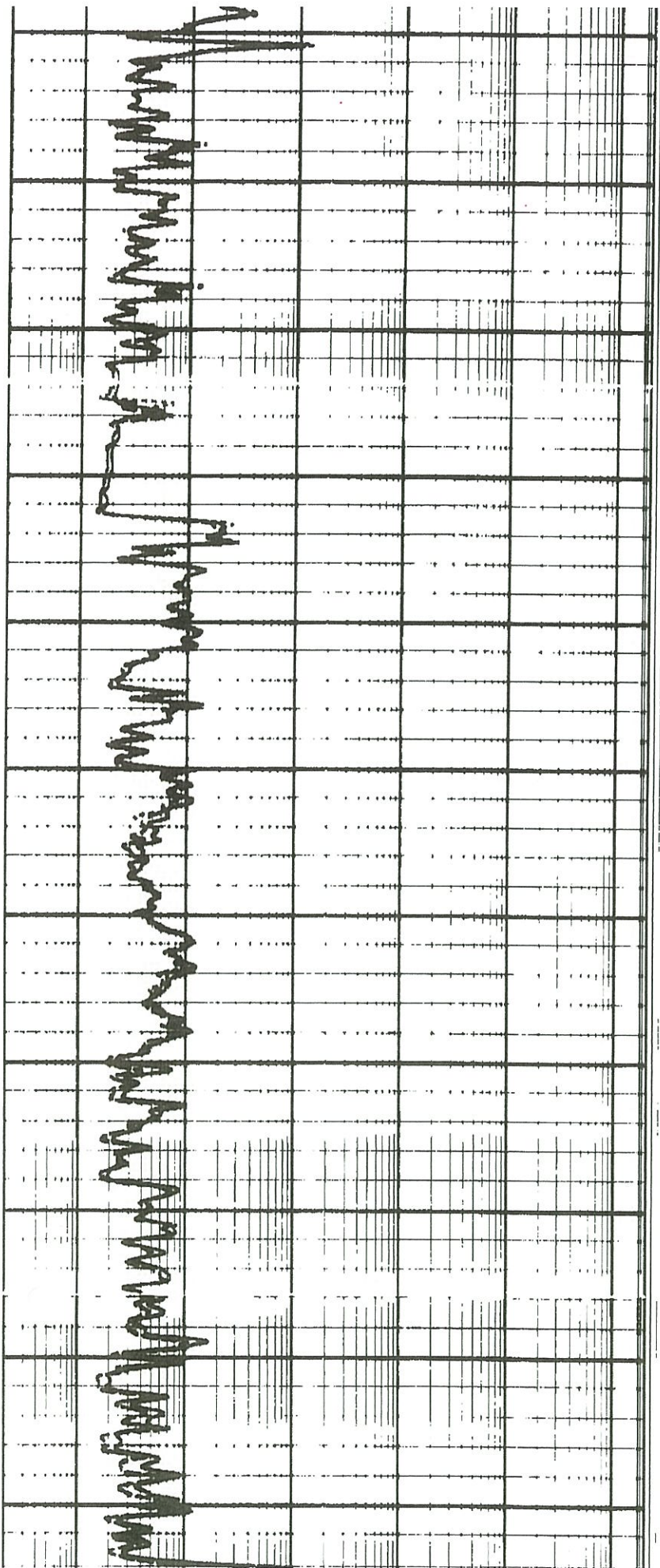
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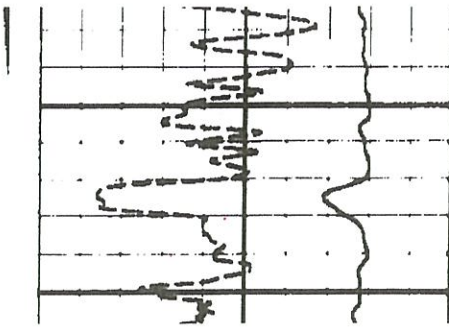
5800

5900

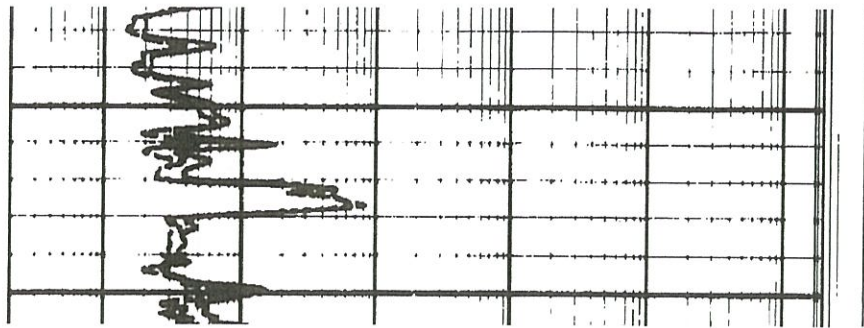
6000

6100





6200



Printed with PreView™

**Weatherford**

111408585 (1)

## APPENDIX N – CLOSURE FUNDING

### *Closure plan and cost estimate {Section 519.C.14.(a)}*

PA Prospect Corporation will maintain a Surety Bond to be on file with the Office of Conservation to provide for adequate closure of the PA Prospect Corporation Commercial SWD Well Facility.

Following is a description of the closure plan, cost estimate, and verification that these documents were provided by an independent professional consultant.

### *Draft documentation of closure funding {Section 519.C.14.(b)}*

Following the closure plan, cost estimate, and verification is draft documentation of closure funding.



**PA PROSPECT CORPORATION (P5603)**

P.O. Box 785  
Columbus, MT 59019  
(406) 322-9951

**Proposed  
Closure Plan  
& Cost Estimate  
Update**

For  
**PA PROSPECT CORPORATION (P5603)**

**REIMER CALHOUN SWD FACILITY  
Section 27, T13N – R11W  
Red River-Bull Bayou Field (7651)  
Red River Parish, Louisiana**

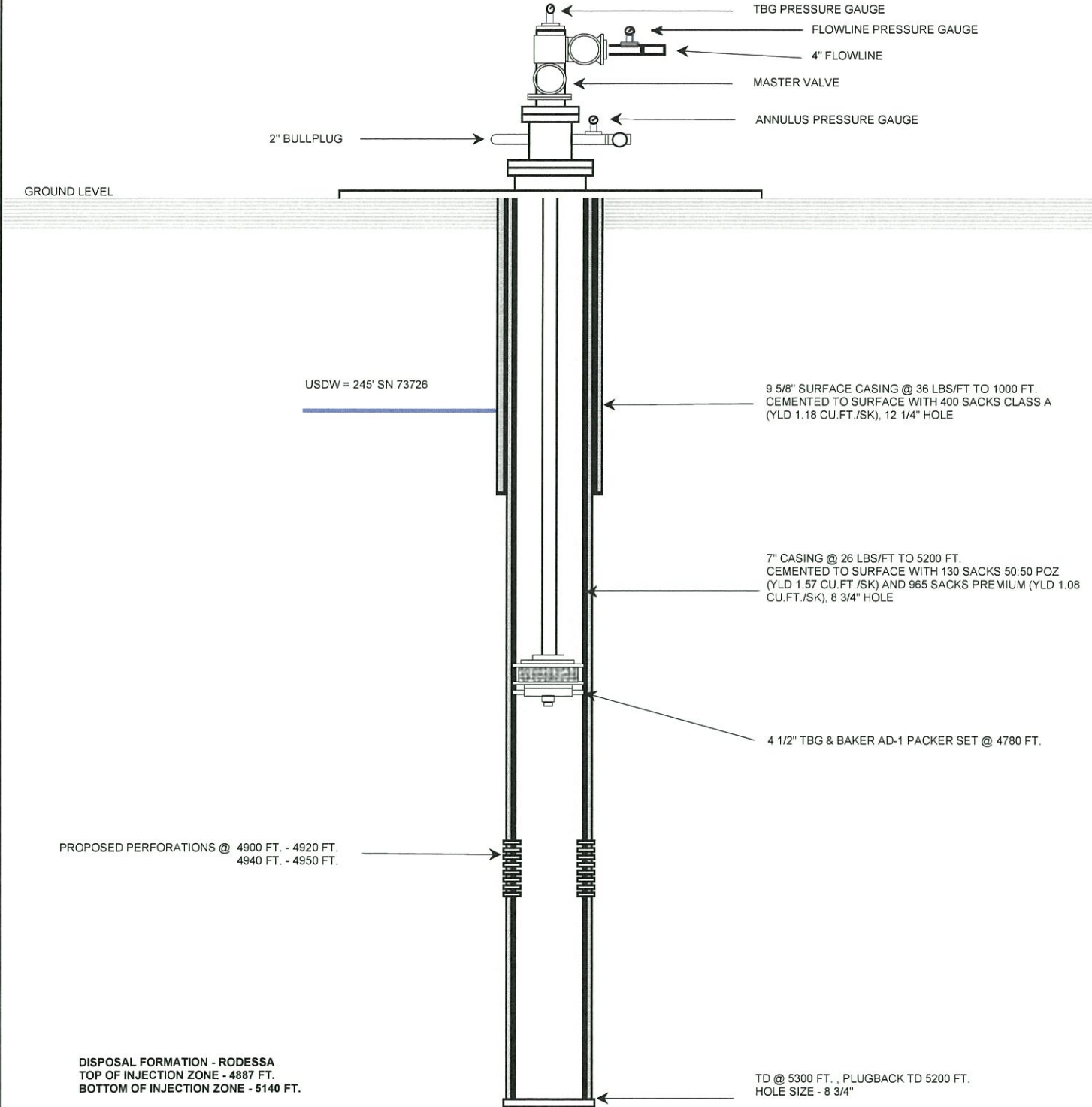
By  
**Charlie Reynolds**  
**ALTEC Environmental Consulting, LLC**  
**February 2019**


**PA PROSPECT CORPORATION  
REIMER CALHOUN SWD NO. 001, NEW WELL  
RED RIVER PARISH, LOUISIANA**

**Plugging and Abandoning Procedure – Reimer Calhoun SWD No. 001**

1. Contact Conservation Enforcement Specialist (CES) agent to witness plugging and abandoning procedure.
2. Pressure test casing/tubing annulus. Bleed off pressure in both annulus and tubing. Use weighted fluid to kill well if necessary.
3. Pull wellhead and surface equipment to remove injection string – (4 1/2" tubing). Release tension packer and pull 4 1/2 in. tubing.
4. Run and set retainer at 4895 ft. Run 2 7/8 in. tubing and string into retainer. Break down formation.
5. Squeeze perforations with 150 sacks of Class A (Yld 1.18 cu.ft./sk) cement or until locks up. Spot 200 ft. of cement on top of retainer (PBSD 4695') with 38 sacks of Class A (Yld 1.18 cu.ft./sk). Wait 12 hours on cement.
6. Go in hole and tag cement. Pressure test to a minimum of 300 psi without more than 5% loss in pressure in a 30 min. period.
7. Pump 10#/gal mud on top of cement plug within wellbore.
8. Spot 200' cement plug from 1100 ft. – 900 ft. with 38 sacks of Class A cement (100' inside and outside surface casing). Wait 12 hours on cement.
9. Go in hole and tag cement. Pressure test plug to a minimum of 300 psi without more than 5% loss in pressure within a 30 min. period.
10. Pump 10#/gal mud on top of cement plug in wellbore.
11. Spot 100' cement plug from 195 ft. – 295 ft. with 20 sacks of Class A cement (50' inside and outside USDW @ 245 ft.). Wait 12 hours on cement.
12. Go in hole and tag cement. Pressure test plug to a minimum of 300 psi without more than 5% loss in pressure within a 30 min. period.
13. Pump 10#/gal mud on top of cement plug in wellbore.
14. Spot 100 ft. cement plug from 105' – 5' with 20 sacks of Class A cement.
15. Cut all casing 5 ft. below ground surface. Weld ½ in. steel plate on each casing string. Weld SN and P&A date on top of plate.
16. Cover steel plate and remediate area, restoring location.

PA PROSPECT CORPORATION (P5603)  
 REIMER CALHOUN SWD NO. 001  
 SECTION 27, TOWNSHIP 13 NORTH, RANGE 11 WEST  
 RED RIVER-BULL BAYOU FIELD (7651)  
 RED RIVER PARISH, LOUISIANA



	PROJECT	SCALE	PA PROSPECT CORPORATION (P5603) REIMER CALHOUN SWD NO. 001 (PROPOSED) SECTION 27, TOWNSHIP 13 NORTH, RANGE 11 WEST RED RIVER-BULL BAYOU FIELD (7651) RED RIVER PARISH, LOUISIANA	ATT. 4A REIMER CALHOUN SWD NO. 001 PROPOSED WELL SCHEMATIC DIAGRAM Revised 6-17-2020
	SA03428	NTS		
	PAGE	DRAWN BY		
	1	CR		
	SHEET	DATE		
A	2/12/2019			

PA PROSPECT CORPORATION (P5603)  
 REIMER CALHOUN SWD NO. 001  
 SECTION 27, TOWNSHIP 13 NORTH, RANGE 11 WEST  
 RED RIVER-BULL BAYOU FIELD (7651)  
 RED RIVER PARISH, LOUISIANA

GROUND LEVEL

Cut all casing 5' below ground level. Weld 1/2" steel plate on each casing string. Weld SN and P&A date on top of plate. Cover Wellhead and remediate area around wellhead. Restore Location.

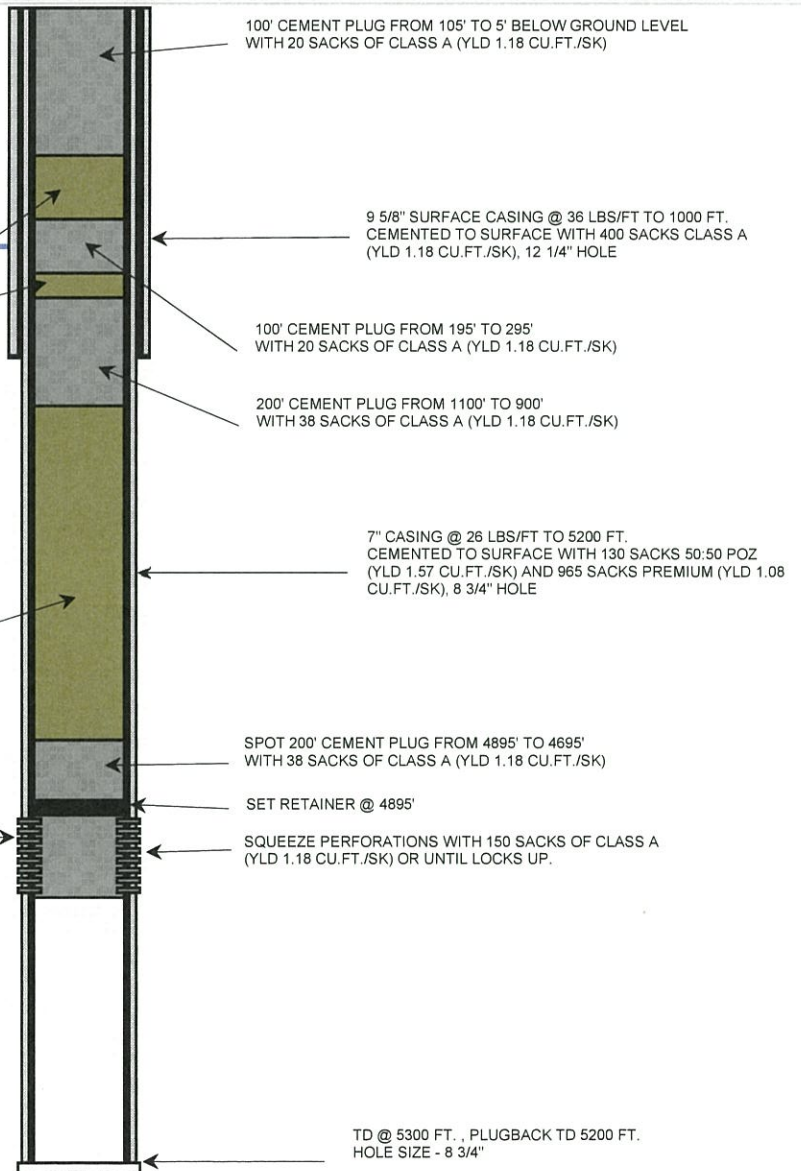
USDW = 245' SN 73726


FILL WELLBORE WITH 10#/GAL MUD ON TOP OF CEMENT PLUG.

FILL WELLBORE WITH 10#/GAL MUD ON TOP OF CEMENT PLUG.

PERFORATIONS @ 4900 FT. - 4920 FT.  
 4940 FT. - 4950 FT.

DISPOSAL FORMATION - RODESSA  
 TOP OF INJECTION ZONE - 4887 FT.  
 BOTTOM OF INJECTION ZONE - 5140 FT.



	PROJECT	SCALE	PA PROSPECT CORPORATION (P5603) REIMER CALHOUN SWD NO. 001 (PROPOSED) SECTION 27, TOWNSHIP 13 NORTH, RANGE 11 WEST RED RIVER-BULL BAYOU FIELD (7651) RED RIVER PARISH, LOUISIANA	APPENDIX N REIMER CALHOUN SWD NO. 001 PROPOSED P&A SCHEMATIC DIAGRAM ATTACHMENT 9 Revised 6-17-2020
	SA03428	NTS		
	PAGE	DRAWN BY		
	1	CR		
	SHEET	DATE		
A	2/12/2019			

**PA PROSPECT CORPORATION  
REIMER CALHOUN SWD NO. 001, NEW WELL  
RED RIVER PARISH, LOUISIANA**

**Closure Cost Estimate to Plug and Abandon – Reimer Calhoun SWD No. 001**

1. Mobilization of Equipment .....	\$3,500.00
2. Work Over Rig Equipment and Expenses (7 days at \$4,000/day).....	\$28,000.00
3. Supervisor (7 days at \$1,200.00 per day).....	\$8,400.00
4. Wireline services.....	\$9,500.00
5. Cementing Equipment and Services .....	\$27,500.00
6. Weighted mud between plugs.....	\$4,500.00
7. Vacuum truck services (2 days at \$850.00 per day) .....	\$1,700.00
8. Backhoe .....	\$650.00
9. Welder.....	\$600.00
<b>Estimated Total to Plug and Abandon .....</b>	<b>\$84,350.00</b>

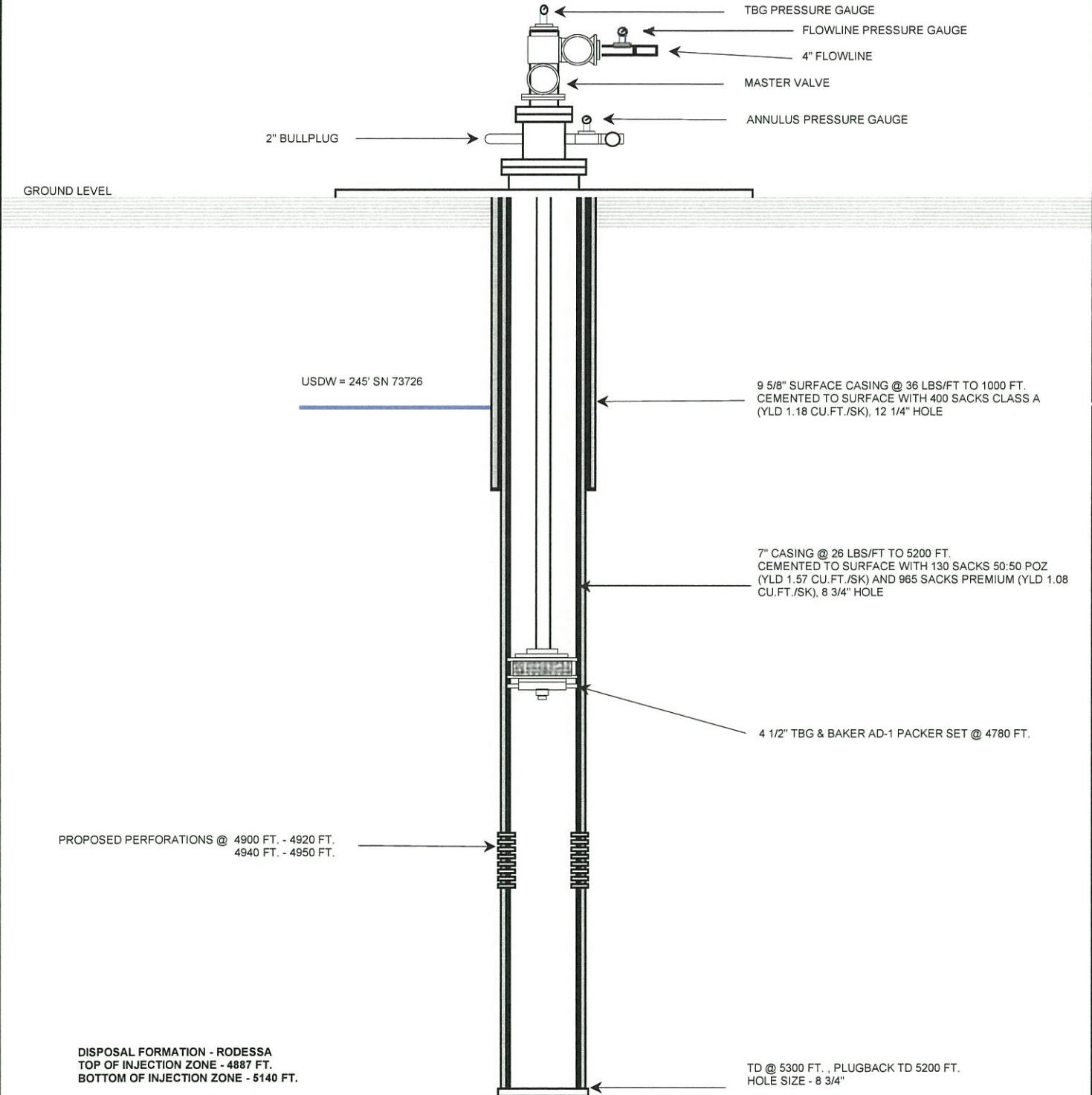


**PA PROSPECT CORPORATION  
REIMER CALHOUN SWD NO. 002, NEW WELL  
RED RIVER PARISH, LOUISIANA**

**Plugging and Abandoning Procedure – Reimer Calhoun SWD N0. 002**

1. Contact Conservation Enforcement Specialist (CES) agent to witness plugging and abandoning procedure.
2. Pressure test casing/tubing annulus. Bleed off pressure in both annulus and tubing. Use weighted fluid to kill well if necessary.
3. Pull wellhead and surface equipment to remove injection string – (4 1/2" tubing). Release tension packer and pull 4 1/2 in. tubing.
4. Run and set retainer at 4895 ft. Run 2 7/8 in. tubing and string into retainer. Break down formation.
5. Squeeze perforations with 150 sacks of Class A (Yld 1.18 cu.ft./sk) cement or until locks up. Spot 200 ft. of cement on top of retainer (PBTD 4695') with 38 sacks of Class A (Yld 1.18 cu.ft./sk). Wait 12 hours on cement.
6. Go in hole and tag cement. Pressure test to a minimum of 300 psi without more than 5% loss in pressure in a 30 min. period.
7. Pump 10#/gal mud on top of cement plug within wellbore.
8. Spot 200' cement plug from 1100 ft. – 900 ft. with 38 sacks of Class A cement (100' inside and outside surface casing). Wait 12 hours on cement.
9. Go in hole and tag cement. Pressure test plug to a minimum of 300 psi without more than 5% loss in pressure within a 30 min. period.
10. Pump 10#/gal mud on top of cement plug in wellbore.
11. Spot 100' cement plug from 195 ft. – 295 ft. with 20 sacks of Class A cement (50' inside and outside USDW @ 245 ft.). Wait 12 hours on cement.
12. Go in hole and tag cement. Pressure test plug to a minimum of 300 psi without more than 5% loss in pressure within a 30 min. period.
13. Pump 10#/gal mud on top of cement plug in wellbore.
14. Spot 100 ft. cement plug from 105' – 5' with 20 sacks of Class A cement.
15. Cut all casing 5 ft. below ground surface. Weld ½ in. steel plate on each casing string. Weld SN and P&A date on top of plate.
16. Cover steel plate and remediate area, restoring location.

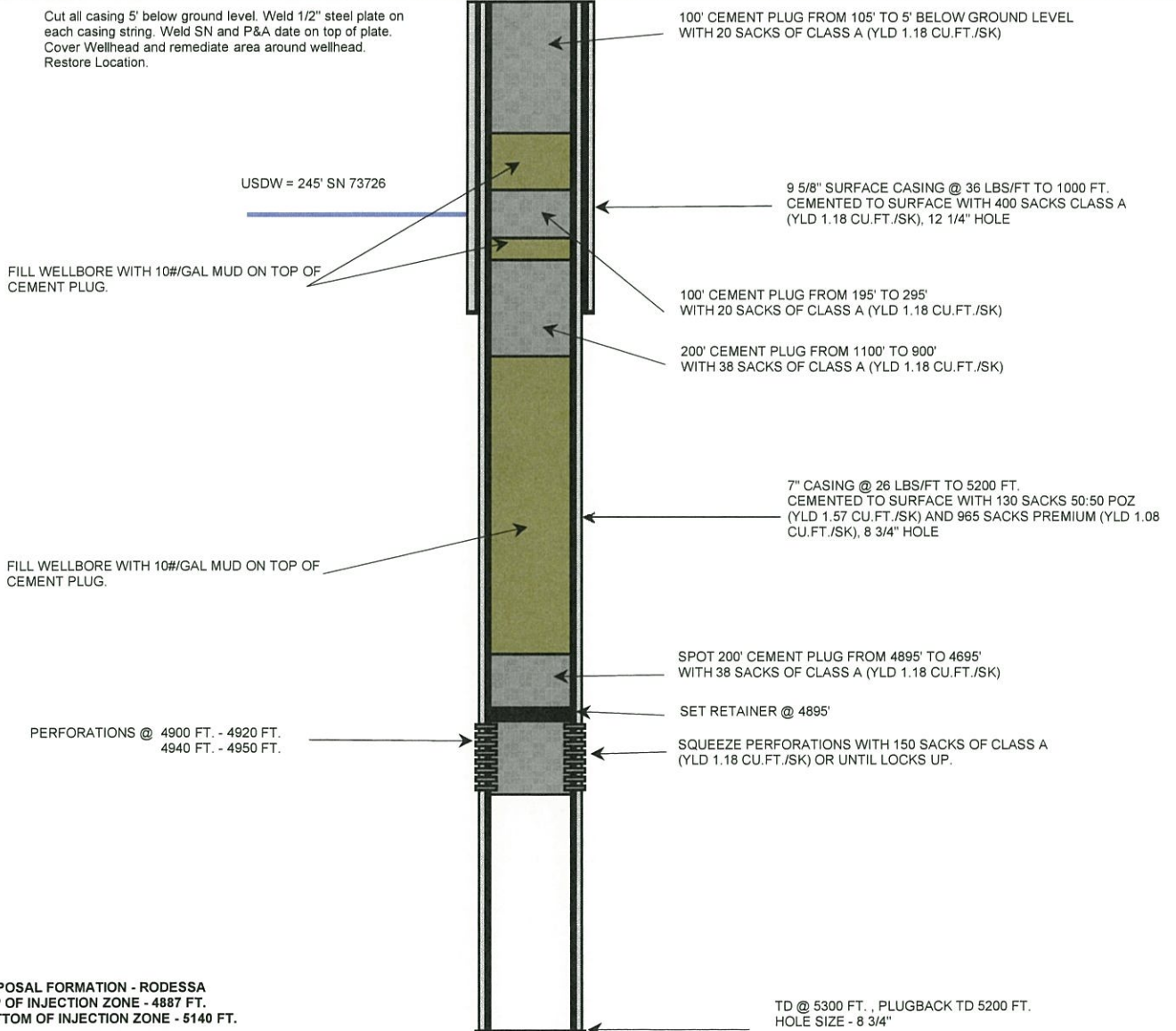
PA PROSPECT CORPORATION (P5603)  
 REIMER CALHOUN SWD NO. 002  
 SECTION 27, TOWNSHIP 13 NORTH, RANGE 11 WEST  
 RED RIVER-BULL BAYOU FIELD (7651)  
 RED RIVER PARISH, LOUISIANA




	PROJECT	SCALE	PA PROSPECT CORPORATION (P5603) REIMER CALHOUN SWD NO. 002 (PROPOSED) SECTION 27, TOWNSHIP 13 NORTH, RANGE 11 WEST RED RIVER-BULL BAYOU FIELD (7651) RED RIVER PARISH, LOUISIANA	ATT. 4A REIMER CALHOUN SWD NO. 002 PROPOSED WELL SCHEMATIC DIAGRAM Revised 6-17-2020
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A	2/12/2019			

PA PROSPECT CORPORATION (P5603)  
 REIMER CALHOUN SWD NO. 002  
 SECTION 27, TOWNSHIP 13 NORTH, RANGE 11 WEST  
 RED RIVER-BULL BAYOU FIELD (7651)  
 RED RIVER PARISH, LOUISIANA

GROUND LEVEL



	PROJECT	SCALE	PA PROSPECT CORPORATION (P5603) REIMER CALHOUN SWD NO. 002 (PROPOSED) SECTION 27, TOWNSHIP 13 NORTH, RANGE 11 WEST RED RIVER-BULL BAYOU FIELD (7651) RED RIVER PARISH, LOUISIANA	APPENDIX N REIMER CALHOUN SWD NO. 002 PROPOSED P&A SCHEMATIC DIAGRAM ATTACHMENT 9 Revised 6-17-2020
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	SHEET	DATE		
A	2/12/2019			

**PA PROSPECT CORPORATION  
REIMER CALHOUN SWD NO. 002, NEW WELL  
RED RIVER PARISH, LOUISIANA**

**Closure Cost Estimate to Plug and Abandon – Reimer Calhoun SWD No. 002**

1. Mobilization of Equipment .....	\$3,500.00
2. Work Over Rig Equipment and Expenses (7 days at \$4,000/day).....	\$28,000.00
3. Supervisor (7 days at \$1,200.00 per day).....	\$8,400.00
4. Wireline services.....	\$9,500.00
5. Cementing Equipment and Services .....	\$27,500.00
6. Weighted mud between plugs.....	\$4,500.00
7. Vacuum truck services (2 days at \$850.00 per day) .....	\$1,700.00
8. Backhoe .....	\$650.00
9. Welder.....	\$600.00
<b>Estimated Total to Plug and Abandon .....</b>	<b>\$84,350.00</b>

**PA PROSPECT CORPORATION  
REIMER CALHOUN SWD NO. 001 AND REIMER CALHOUN SWD NO. 002  
RED RIVER PARISH, LOUISIANA**

**Closure Cost Estimate to Abandon Reimer Calhoun - Tank Battery & Facility**

1. Two (2) vacuum trucks to clean tanks (4 days at \$1,700.00 per day).....	\$6,800.00
2. Labor to clean tanks (7 days at \$1,200.00 per day) .....	\$8,400.00
3. Disposal of 5,000 barrels of saltwater at \$1.25 per barrel .....	\$6,250.00
4. Disposal of approximately 600 barrels of solids, tank bottoms at \$12.50 per barrel .....	\$7,500.00
5. Transportation for disposal of solids.....	\$1,500.00
6. Dismantling and disposal of tanks and equipment.....	\$4,200.00
7. Demolition of concrete, retaining walls, and other materials related to site cleanup .....	\$120,000.00
8. Demolition and disposal or recycling of facility piping .....	\$4,980.00
9. Removal of lab and trailer.....	\$5,000.00
10. Backfill and level site and plant grass.....	\$4,100.00
11. Miscellaneous expenses .....	\$5,000.00
<b>Estimated Total of Closure of Tank Battery &amp; Facility .....</b>	<b>\$173,730.00</b>

**PA PROSPECT CORPORATION  
REIMER CALHOUN SWD NO. 001 AND REIMER CALHOUN SWD NO. 002  
COMMERCIAL FACILITY CLOSURE COSTS  
SECTION 27 – T13N – R11W  
RED RIVER PARISH, LOUISIANA**

**Summary Cost of Plugging and Abandoning Reimer Calhoun SWD No. 001 & No. 002, and Closure  
of Tank Battery & Facility**

1. Estimated Total to Plug and Abandon Reimer Calhoun SWD No. 001 .....	\$84,350.00
2. Estimated Total to Plug and Abandon Reimer Calhoun SWD No. 002.....	\$84,350.00
3. Estimated Total of Closure of Tank Battery & Facility .....	\$173,730.00
4. Supervision (15% of TB Facility Total).....	\$26,059.50
5. Contingency (10%).....	\$36,848.95
<b>Total Estimated Cost to Plug and Abandon Well, Close Site and Remove Surface Equipment .....</b>	<b>\$405,338.45</b>

If the site is approved, once in operation this cost will be updated every year in accordance with LAC 43:XIX.513.C

**AFFIDAVIT OF INDEPENDENT PROFESSIONAL CONSULTANT**

STATE OF LOUISIANA

PARISH OF CADDO

Charlie Reynolds, being duly sworn, deposes and says:

I am the Oil and Gas Division Manager of ALTEC Environmental Consulting, LLC, a Louisiana Limited Liability Company; and

This affidavit is being executed for the purpose of notifying the Louisiana Department of Natural Resources certifying that the closure plan and cost estimate included within this application were provided by ALTEC Environmental Consulting, LLC, an independent professional consultant.



\_\_\_\_\_  
Charlie Reynolds, Agent

Sworn to before me this 13<sup>th</sup> day of February, 2019.



\_\_\_\_\_  
Notary Public

Notary # 66595

Notary Public in and for DeSoto Parish, Louisiana.

My commission expires At Death.

Address of agent signing this Affidavit:

Charlie Reynolds  
ALTEC Environmental Consulting, LLC  
10100 Woolworth Road  
Keithville, LA 71047

**AFFIDAVIT OF INDEPENDENT PROFESSIONAL CONSULTANT**

STATE OF LOUISIANA

PARISH OF CADDO

Charlie Reynolds, being duly sworn, deposes and says:

I am the Oil and Gas Division Manager of ALTEC Environmental Consulting, LLC, a Louisiana Limited Liability Company; and

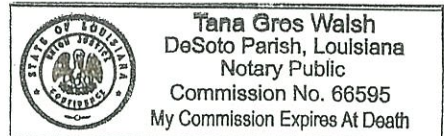
This affidavit is being executed for the purpose of notifying the Louisiana Department of Natural Resources certifying that the closure plan and cost estimate included within this application were provided by ALTEC Environmental Consulting, LLC, an independent professional consultant.

Charlie Reynolds, Agent

Sworn to before me this 11 day of November, 2020.

Notary Public

Notary # 66595



Notary Public in and for DeSoto Parish, Louisiana.

My commission expires At Death.

Address of agent signing this Affidavit:

Charlie Reynolds  
ALTEC Environmental Consulting, LLC  
10100 Woolworth Road  
Keithville, LA 71047

**ORIGINAL**



Upon completion of the application process, the commissioner will set the amount of the required bond or irrevocable letter of credit in accordance with LAC 43:XIX.519.C.14b. The applicant will obtain the required bond or irrevocable letter of credit in that amount set by the commissioner. A draft irrevocable letter of credit and Surety Bond are attached.

**DRAFT IRREVOCABLE LETTER OF CREDIT**

Dears Sirs:

We hereby establish our Irrevocable Letter of Credit No. \_\_\_\_\_ in your favor, at the request and for the account of PA PROSPECT CORPORATION up to the aggregate amount of **(amount)** available upon presentation by the Commissioner of Conservation, Office of Conservation, Department of Natural Resources, State of Louisiana, on:

- 1) your sight draft, bearing reference to this letter of credit No. \_\_\_\_\_; and
- 2) your signed statement reading as follows: "I certify that the amount of the draft is payable pursuant to regulations issued in accordance with the requirements of Louisiana R.S.30:1 et seq."

This letter of credit is effective as of \_\_\_\_\_, 20\_\_\_\_, and shall expire on October 1, 20\_\_\_\_, but such expiration date shall be automatically extended for a period of at least one year on October 1, 20\_\_\_\_, and on each successive expiration date, unless at least 120 days before the current expiration date, we notify both you and PA PROSPECT CORPORATION by certified mail that we have decided not to extend this letter of credit beyond the current expiration date. In the event you are so notified, any unused portion of the credit shall be available upon presentation of your sight draft for 120 days after the date of receipt by both you and PA PROSPECT CORPORATION as shown on the signed return receipts.

This letter is subject to the Uniform Customs and Practice for Documentary Credits (2007 Revision), International Chamber of Commerce Publication No. 600 ("UCP 600").

We hereby agree with you and negotiating banks or bankers that drafts drawn under and in compliance with the terms of this credit shall be duly honored on due presentation to the drawee.

{Signatures(s) and title(s) of official(s) of issuing institution and date}

(Two Bank signatures required)

**(Note: Beneficiary is Office of Conservation, Department of Natural Resources, State of Louisiana.)**

STATE OF LOUISIANA  
PARISH OF EAST BATON ROUGE

**DRAFT SURETY BOND**

FROM: PA PROSPECT CORPORATION  
AND  
SURETY

TO: OFFICE OF CONSERVATION  
DEPARTMENT OF NATURAL RESOURCES  
STATE OF LOUISIANA

THIS SURETY BOND is given by PA Prospect Corporation, principal, and [surety name], Surety, to Office of Conservation, Department of Natural Resources, State of Louisiana, 70804-9275, pursuant to the following terms and conditions:

Principal and surety are bound to creditor in the sum of \$[TBD] Dollars, for the payment of which principal and surety jointly and severally bind themselves, their successors, and assigns.

Principal has applied to Creditor to receive a permit or has in effect a permit issued by Creditor to operate a commercial facility, Site Code TBD, for the receipt, storage, treatment and/or disposal of exploration and production waste in RED RIVER Parish, Louisiana pursuant to the provisions of LSA-R.S. 30:4(I)(10), and LAC43:XIX.Subpart 1.Chapter 5, Sections 513 and 567. Principal is required to provide bonding to insure the adequate closure of such facility and this bond is issued for said purpose.

This obligation shall run continuously and shall remain in full force and effect until and unless the bond is canceled as provided herein or as otherwise provided by law.

Surety may cancel the bond only by sending notice of cancellation by certified mail to both Principal and Creditor. Cancellation cannot occur or be effective until 120 days after the date of receipt of notice of cancellation by both Principal and Creditor. Further, such notice of cancellation or cancellation shall not affect this surety bond in respect to any obligation which may have arisen prior thereto.

Surety shall become liable on this bond obligation if and when Principal fails to perform his obligation to adequately close the facility as determined by Creditor after notice and in accordance with administrative procedures.

Following such determinations, Creditors shall draw on the surety bond by requesting payment by certified mail, and Surety shall pay the amount thereof within 30 days of receipt of said demand. If payment is not made within said 30 days period Surety shall also be liable for legal interest from date of receipt of demand, 10% of principal and interest as attorney's fees and all court cost incurred to collect the obligation.

The amount of the bond liability is as expressed herein, but Principal and Surety take notice of the legal requirements for annual review of the closure bond amounts, which is based upon cost estimates for adequate closure. Following this review Creditor may increase, decrease or allow the amount to remain the same. Upon notice from Creditor, if an increase is required, Principal shall cause the bond amount to be increased or shall otherwise provide the added security within 60 days after notice.

I WITNESS WHEREOF, the principal and Surety have executed this surety bond at \_\_\_\_\_ on this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
WITNESS

\_\_\_\_\_  
PRINCIPLE

\_\_\_\_\_  
WITNESS

\_\_\_\_\_  
WITNESS

\_\_\_\_\_  
SURETY

\_\_\_\_\_  
WITNESS

Approved, accepted and executed by Creditor at Baton Rouge, Louisiana this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
WITNESS

OFFICE OF CONSERVATION

\_\_\_\_\_  
WITNESS

By: \_\_\_\_\_  
Commissioner of Conservation

**THIS DOCUMENT IS A DRAFT SURETY BOND**

**The Times**  
State of Louisiana  
Parish of Caddo  
**AFFIDAVIT OF PUBLICATION**

ALTEC ENVIRONMENTAL CONSULTING  
10100 WOOLWORTH RD  
KEITHVILLE, LA 71047

Account No.: SHR-CA2245  
Ad No.: 0003372409  
Ad Total: \$1,284.30  
PO #: SA03428

*Diana Figueroa*, personally known to me who being duly sworn, deposes and says that she is the LEGAL CLERK, for The Times, and that the attached advertisement published entitled:

NOTICE OF INTENT IN ACCORDANCE WITH THE  
LAWS OF THE STATE OF LOUISIANA AND THE  
RULES AND REGULATIONS OF THE DEPARTMENT  
OF NATURAL RESOURCES, OFFICE OF CONSERVA  
**Notice published in the Times on 02/07/19, 02/08/19, 02/09/19**

(Signed) *Diana Figueroa*

*Kathleen A. Gibson* 2/11/2019

(Notary)



NOTICE OF INTENT

IN ACCORDANCE WITH THE LAWS OF THE STATE OF LOUISIANA AND THE RULES AND REGULATIONS OF THE DEPARTMENT OF NATURAL RESOURCES, OFFICE OF CONSERVATION,

PA PROSPECT CORPORATION (P5603)  
P.O. BOX 785  
COLUMBUS, MT 59019  
(406) 322-9951

IS HEREBY PUBLISHING A NOTICE OF INTENT TO FILE AN APPLICATION WITH THE COMMISSIONER OF THE OFFICE OF CONSERVATION, POST OFFICE BOX 94275, BATON ROUGE, LOUISIANA 70804-9275. SAID APPLICATION WILL REQUEST APPROVAL FROM THE ENVIRONMENTAL DIVISION TO CONSTRUCT AND OPERATE A COMMERCIAL DEEP WELL INJECTION WASTE DISPOSAL FACILITY FOR DISPOSAL OF EXPLORATION & PRODUCTION WASTE (E & P WASTE) FLUIDS.

THE PROPOSED FACILITY WILL BE LOCATED IN RED RIVER PARISH, SECTION 27, TOWNSHIP 13 NORTH, RANGE 11 WEST, APPROXIMATELY 11.0 MILES NORTHWEST OF COUSHATTA, LOUISIANA.

APPLICANT INTENDS TO DISPOSE OF EXPLORATION AND PRODUCTION WASTE FLUIDS GENERATED FROM THE DRILLING AND PRODUCTION OF OIL AND GAS WELLS BY MEANS OF DEEP WELL INJECTION INTO THE SUBSURFACE AFTER INITIAL STORAGE IN TANKS.

The Times  
February 7, 2019  
February 8, 2019  
February 9, 2019

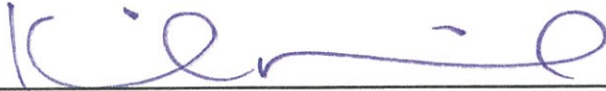
CAPITAL CITY PRESS

Publisher of  
THE ADVOCATE

PROOF OF PUBLICATION

The hereto attached notice was published in THE ADVOCATE, a daily newspaper of general circulation published in Baton Rouge, Louisiana, and the Official Journal of the State of Louisiana, City of Baton Rouge, and Parish of East Baton Rouge or published daily in THE NEW ORLEANS ADVOCATE, in New Orleans Louisiana, or published daily in THE ACADIANA ADVOCATE in Lafayette, Louisiana, in the following issues:


02/11/2019, 02/12/2019, 02/13/2019



Kristi Bunch, Public Notices Representative

Sworn and subscribed before me by the person  
whose signature appears above

2/13/2019



M. Monic McChristian,  
Notary Public ID# 88293  
State of Louisiana  
My Commission Expires: Indefinite



ALTEC ENVIRONMENTAL	328659-01
STACI PRICE	
10100 WOOLWORTH ROAD	
KEITHVILLE, LA 71047	

# **NOTICE OF INTENT**

**IN ACCORDANCE WITH THE LAWS OF THE STATE OF LOUISIANA AND THE RULES AND REGULATIONS OF THE DEPARTMENT OF NATURAL RESOURCES, OFFICE OF CONSERVATION,**

**PA PROSPECT CORPORATION (P5603)  
P.O. BOX 785  
COLUMBUS, MT 59019  
(406) 322-9951**

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# AFFIDAVIT OF PUBLICATION

STATE OF LOUISIANA

Parish of Natchitoches

Before me, a Notary Public, personally came and appeared Vickie Feazell

who, being duly sworn, did depose and say that she/he is Bookkeeper of

The *Coushatta Citizen*, a newspaper of general circulation published within the Parish of Red River ,

and that Notice of Intent – PA Prospect Corporation (P5603) is publishing a Notice of Intent to file an application with the Commissioner of the Office of Conservation for approval to construct and operate a commercial deep well injection waste disposal facility for disposal of exploration & production waste (E&P Waste) fluids. Located in Red River Parish, Section 27, township 13 North, Range 11 West, approx. 11.0 miles Northwest of Coushatta, Louisiana #19-19

as per copy attached hereto, was published in said newspaper in the issues of 2/14, 2/21 & 2/28/19

(S) Vickie Feazell

SWORN AND SUBSCRIBED to before me this 28<sup>th</sup> day of February, 2019.

Tammy E. Raynes  
Notary Public

Tammy E. Raynes  
#035617

# NOTICE OF INTENT

IN ACCORDANCE WITH THE LAWS OF THE STATE OF LOUISIANA AND THE RULES AND REGULATIONS OF THE DEPARTMENT OF NATURAL RESOURCES, OFFICE OF CONSERVATION,

PA PROSPECT CORPORATION (P5603)

P.O. BOX 785

COLUMBUS, MT 59019

(406) 322-9951

IS HEREBY PUBLISHING A NOTICE OF INTENT TO FILE AN APPLICATION WITH THE COMMISSIONER OF THE OFFICE OF CONSERVATION, POST OFFICE BOX 94275, BATON ROUGE, LOUISIANA 70804-9275. SAID APPLICATION WILL REQUEST APPROVAL FROM THE ENVIRONMENTAL DIVISION TO CONSTRUCT AND OPERATE A COMMERCIAL DEEP WELL INJECTION WASTE DISPOSAL FACILITY FOR DISPOSAL OF EXPLORATION & PRODUCTION WASTE (E & P WASTE) FLUIDS.

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APPLICANT INTENDS TO DISPOSE OF EXPLORATION AND PRODUCTION WASTE FLUIDS GENERATED FROM THE DRILLING AND PRODUCTION OF OIL AND GAS WELLS BY MEANS OF DEEP WELL INJECTION INTO THE SUBSURFACE AFTER INITIAL STORAGE IN TANKS.

#019-19

2/14, 2/21, 2/28



JOHN BEL EDWARDS  
GOVERNOR

State of Louisiana  
DEPARTMENT OF NATURAL RESOURCES  
OFFICE OF CONSERVATION

THOMAS F. HARRIS  
SECRETARY

RICHARD P. IEYOUB  
COMMISSIONER OF CONSERVATION

August 17, 2020

Melissa Anderson  
PA Prospect Corporation (P5603)  
P.O. Box 785  
Columbus, MT 59019

Re: Application Nos. 40928 and 40930 / Class II Commercial SWD Wells  
Reimer Calhoun SWD Well No. 001 and Reimer Calhoun SWD Well No. 002  
Red River-Bull Bayou Field, Red River Parish

Dear Ms. Anderson:

This Office has completed the technical review of each referenced application and deemed them to be administratively complete. You must provide the Office of Conservation/Environmental Division one original and one copy of the documentation as approved by the Injection & Mining Division and as required in Section F of the Office of Conservation/Environmental Division document, *Commercial Facility & Transfer Station Permit Application Checklist*. Please include a copy of this letter with that submittal.

Please be advised, injection will only be permitted in distinct intervals exhibiting sufficient porosity and permeability to support radial flow of injected fluids as demonstrated by the open-hole logs and the analyses of the sidewall cores.

Please contact Steve Lee at (225) 342-5569 if you have any questions.

Yours very truly,

Richard P. Ieyoub  
Commissioner of Conservation

Stephen H. Lee, Director  
Injection & Mining Division

RPI:SHL

F:\Injection\Engineering\Letter Library\Commercial\Env Adm Complete\Applications\40928 and 40930.docx



February 12, 2019

Mr. Gary Snellgrove  
Office of Conservation  
Injection and Mining Division  
P. O. Box 94275  
Baton Rouge, Louisiana 70804-9275

RE: PA Prospect Corporation (P5603)  
Commercial E and P Waste Treatment Facility  
Reimer Calhoun SWD No. 002  
Red River-Bull Bayou Field, Red River Parish, Louisiana  
APN SA03428

Dear Mr. Snellgrove,

ALTEC Environmental Consulting, LLC, on behalf of our client, has enclosed an original and one (1) copy of a Commercial Saltwater Disposal Well Application for the above referenced commercial facility, including all required fees and attachments.

Thank you for your assistance in processing this application. If you need any additional information, please feel free to contact me at (318) 687-3771.

Sincerely,

A handwritten signature in blue ink that reads "Charles Reynolds".

Charles Reynolds, Geologist/Agent



## COMMERCIAL SALTWATER DISPOSAL WELL PERMIT APPLICATION

**MAILING ADDRESS:**  
OFFICE OF CONSERVATION  
INJECTION & MINING DIVISION  
P.O. BOX 94275-CAPITOL STATION  
BATON ROUGE, LA 70804-9275

**PHYSICAL ADDRESS:**  
OFFICE OF CONSERVATION  
INJECTION & MINING DIVISION  
617 N. THIRD ST., SUITE 817  
BATON ROUGE, LA 70802

**UIC-2 COM SWD**

PLEASE READ APPLICATION PROCEDURES TYPE ONLY

TYPE ONLY

<b>1. APPLICATION TO:</b> <input checked="" type="checkbox"/> DRILL NEW COM SWD WELL <input type="checkbox"/> RE-DRILL FOR COM SWD DISPOSAL (SN. _____ ) <input type="checkbox"/> CONVERT TO COM SWD WELL <input type="checkbox"/> RE-PERMIT COM SWD WELL	<b>2. CONSERVATION ORDER NO.</b> ORDER 29-B
<b>3. OPERATOR NAME:</b> PA Prospect Corporation <b>ADDRESS:</b> P.O. Box 785 <b>CITY, STATE, ZIP:</b> Columbus, MT 59019 <b>EMAIL:</b> energyequity@yahoo.com	<b>4. OPERATOR CODE:</b> <div style="text-align: center;">P5603</div>
	<b>5. PHONE:</b> <b>FAX:</b> <div style="display: flex; justify-content: space-between;"> <span>406-322-9951</span> <span>406-322-9956</span> </div>

### WELL INFORMATION

<b>6. PROPOSED WELL NAME AND NUMBER:</b> REIMER CALHOUN SWD      No. 002	<b>7. SERIAL NO. (CONVERSION &amp; RE-PERMIT ONLY)</b> NEW WELL			
<b>8. FIELD:</b> RED RIVER-BULL BAYOU (7651)	<b>9. PARISH:</b> Red River      ( 41 )	<b>10. SEC.</b> "27"	<b>TWP.</b> "13N"	<b>RNG.</b> "11W"

**11. LEGAL LOCATION DESCRIPTION (FROM PLAT)**  
 Located 1124 feet from the South line and 1224 feet from the East line of Section 27, Township 13 North, Range 11 West, Red River Parish, Louisiana

<b>12. LOCATION COORDINATES:</b> GEOGRAPHIC COORDINATE SYSTEM (NAD27)	STATE PLANE COORDINATES (LAMBERT, NAD 27)
LATITUDE:    32°    DEG    04'    MIN    51.413"    SEC LONGITUDE:    93°    DEG    28'    MIN    43.193"    SEC	NORTH ZONE: <input checked="" type="checkbox"/> SOUTH ZONE: <input type="checkbox"/> x: 1696887.147      y: 515810.176

### WELL CONSTRUCTION INFORMATION

13. CASING SIZE (IN.)	HOLE SIZE (IN.)	CASING WEIGHT	DEPTH SET		SACKS CEMENT	TYPE CEMENT		TOP OF CEMENT
			TOP (FT.)	BOTTOM (FT.)				
9 5/8	12 1/4	36.0	0	1000	400	Class A		Surface
7	8 3/4	26.0	0	5200	130	965	50/50 POZ    PREMIUM	Surface
							1.57 cu.ft./sk    1.08 cu.ft./sk	

**14. TUBING:**       STEEL       OTHER (IDENTIFY)      **SIZE:** 4 1/2    **IN.**      **DEPTH (FT.):** 4780

**15. PACKER:**     TENSIONAL     PERMANENT     COMPRESSIONAL      **MAKE:** Baker      **MODEL:** AD-1      **DEPTH SET (FT.):** 4780

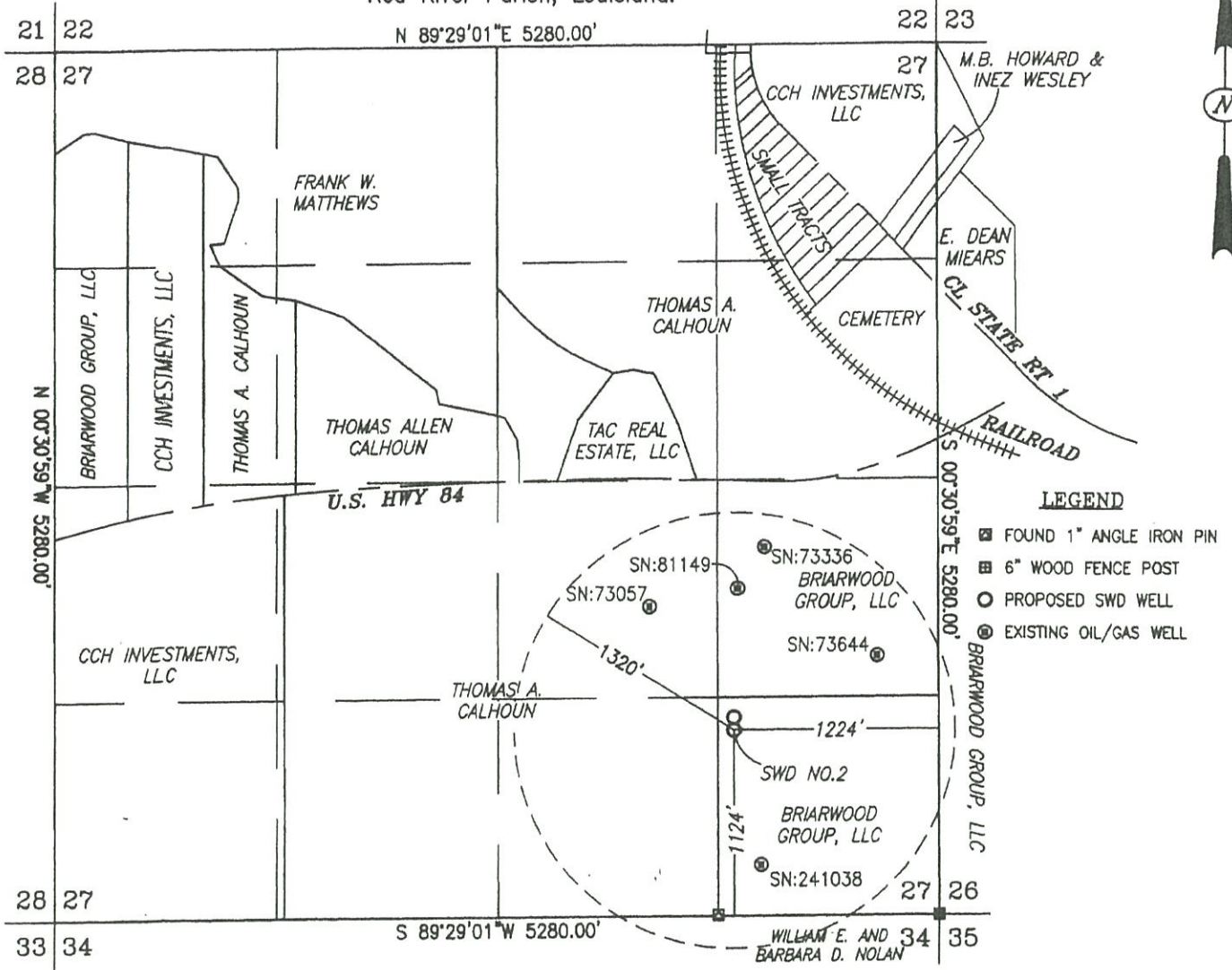
**16. PLUG-BACK DEPTH (FT.):**      5200      **17. DRILLED-OUT DEPTH (FT.):**      5300      **18. TOTAL DEPTH OF WELL (FT.):**      5300

### PROPOSED INJECTION INTERVAL INFORMATION

<b>19. DEPTH OF PROPOSED INJECTION ZONE (MD IN FT.):</b> <b>TOP:</b> 4887 <b>BOTTOM:</b> 5140	<b>20. INJECTION FORMATION(S):</b> RODESSA
<b>21. INJECTION THROUGH:</b> <input checked="" type="checkbox"/> Perforations <input type="checkbox"/> Open Hole <input type="checkbox"/> Screen	<b>22. PROPOSED PERFORATED OR OPEN HOLE INTERVAL (MD IN FT.):</b> <b>TOP:</b> 4900 <b>BOTTOM:</b> 4950

PRESSURE CALCULATION DATA	
<b>23. INJECTION RATE (BARRELS/MINUTE):</b> NORMAL: 10.4 BPM      MAXIMUM: 17.4 BPM	<b>24. INJECTION FLUID EXPECTED TEMPERATURE ( °F ):</b> SUMMER: 85 °F      WINTER: 80 °F
<b>25. INJECTION FORMATION PROPERTIES:</b> <input checked="" type="checkbox"/> ESTIMATED <input type="checkbox"/> MEASURED    IF MEASURED, LIST SOURCE: _____ PERMEABILITY: 1000 MILLIDARCY (MD)      PEROSITY: 30%    PERCENT:	
<b>26. CALCULATE THE MASIP BASED ON THE FRACTURE GRAIENT OF THE:</b> <input checked="" type="checkbox"/> INJECTION FORMATION (SEE ATTACHMENT 7) <input type="checkbox"/> CONFINING FORMATION (SEE ATTACHMENT 7)	
OTHER INFORMATION	
<b>27. DESCRIBE THE CONTIGENCT PLANS FOR SALTWATER DISPOSAL WHEN THE WELL IS DOWN:</b> In the event the well/facility is down, water will be transported to another facility owned and operated by PA PROSPECT CORPORATION (P5603)	
<b>28. IS THE PROPOSED WELL LOCATED ON INDIAN LANDS UNDER THE JURISDICTION OR PROTECTION OF THE FEDERAL GOVERNMENT?</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>29. IS THE PROPOSED WELL LOCTED ON STATE WATER BOTTOMS OR OTHER LANDS OWNED OR UNDER JURISDICTION OF THE STATE?</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
AUTHORIZED AGENT	
<b>30. AGENT OR AUTHORIZED TO ACT FOR THE OPERATOR DURING PROCESSING OF THIS APPLICATION.</b>  THE SIGNATURE BY THE OPERATOR CERTIFYING THIS APPLICATION WILL AUTHORIZE THIS AGENT OR CONTACT TO SUBMIT ADDITIONAL INFORMATION AS REQUESTED AND TO GIVE ORAL STATEMENTS IN SUPPORT OF THIS APPLICATION.  Name: CHARLIE REYNOLDS Company: ALTEC ENVIRONMENTAL CONSULTING, LLC Address: P. O. BOX 17867, SHREVEPORT, LA 71138-0867 Phone: (318) 687-3771 email: CHARLIE.REYNOLDS@ALTECENV.COM	
<b>WRITTEN CORRESPONDACE SHOULD BE SENT TO (CHOOSE ONE):</b> <input type="checkbox"/> Operator <input checked="" type="checkbox"/> Authorized Agent	
CERTIFICATION BY OPERATOR	
<i>I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my personal knowledge or inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.</i>	
<b>31. NAME (PRINT)</b> Jerry Nelson	<b>32. TITLE (PRINT)</b> President
<b>33. SIGNATURE</b> 	<b>34. DATE</b> 6-17-20

Section 27, Township 13 North, Range 11 West,  
Red River Parish, Louisiana.



LEGEND

- FOUND 1" ANGLE IRON PIN
- 6" WOOD FENCE POST
- PROPOSED SWD WELL
- ⊙ EXISTING OIL/GAS WELL

PLAT SHOWING LOCATION

**PA PROSPECT CORPORATION ----- REIMER CALHOUN SWD NO. 002**

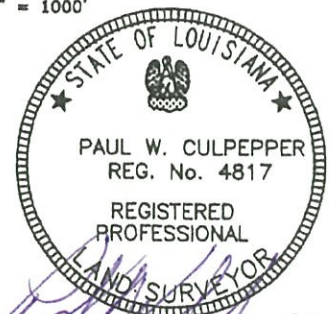
Located 1124 feet from the South line and 1224 feet from the East line of Section 27,  
Township 13 North, Range 11 West, Red River Parish, Louisiana.

Latitude = 32°04'51.41310" North  
Longitude = 93°28'43.19307" West  
Latitude = 32.080948808" North  
Longitude = 93.47866474" West  
NAD 27  
X = 1,696,887.147  
Y = 515,810.176  
State Plane Grid, LA North 1701

Latitude = 32°04'51.99209" North  
Longitude = 93°28'43.82597" West  
Latitude = 32.08110891" North  
Longitude = 93.47884055" West  
NAD 83  
X = 2,977,673.042  
Y = 576,517.735  
State Plane Grid, LA North 1701



Scale: 1" = 1000'



I, Paul W. Culpepper, Professional Land Surveyor, certify that the well location depicted and described in this plat was stated and surveyed in the field by me or under my direction with accuracy and precision to the nearest foot. I have properly examined the survey and plat, and have determined that it meets the minimum standards of practice for land surveying in the State of Louisiana.

Ground Elevation = 138.12  
(NAVD 88)

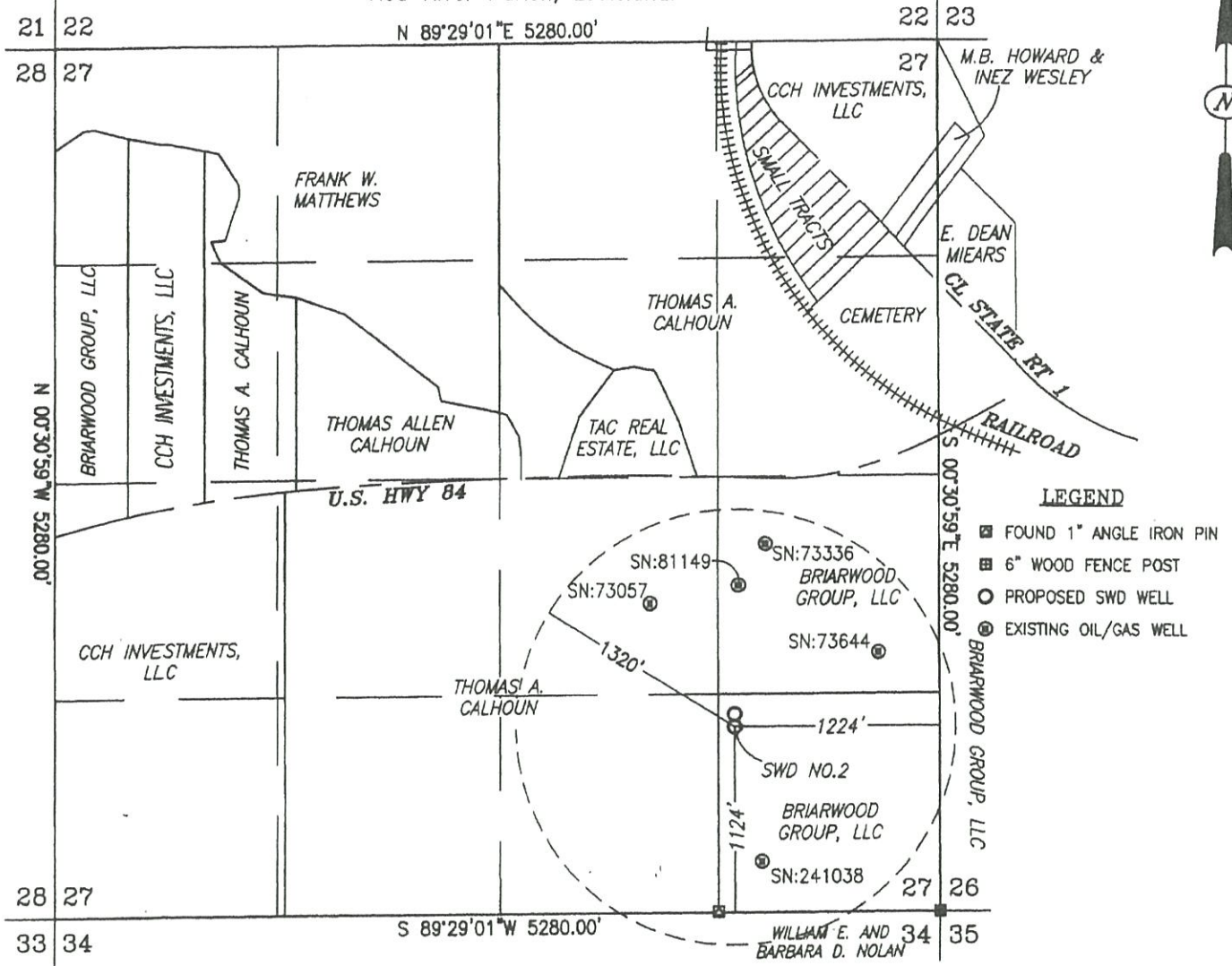
DATE: FIELD: JANUARY 29, 2019  
DRAWING: JANUARY 30, 2019  
REVISED: OCTOBER 30, 2019

SCALE: 1" = 1000'  
LOCATION: 27-13-11  
DATE: JANUARY 30, 2019

**Landmark Land Surveying, Inc.**  
114 Pearl St., Minden, Louisiana  
(318) 371-9100

18-224D

Section 27, Township 13 North, Range 11 West,  
Red River Parish, Louisiana.



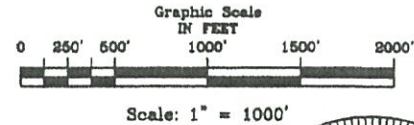
PLAT SHOWING LOCATION

**PA PROSPECT CORPORATION ----- REIMER CALHOUN SWD NO. 002**

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State Plane Grid, LA North 1701

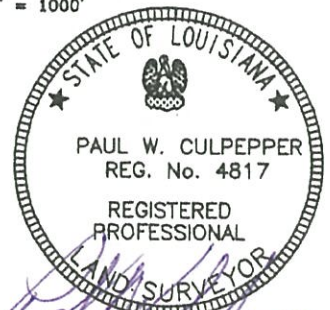
Latitude = 32°04'51.99209" North  
Longitude = 93°28'43.82597" West  
Latitude = 32.08110891" North  
Longitude = 93.47884055" West  
NAD 83  
X = 2,977,673.042  
Y = 576,517.735  
State Plane Grid, LA North 1701



Ground Elevation = 138.12  
(NAVD 88)

DATE: FIELD: JANUARY 29, 2019  
DRAWING: JANUARY 30, 2019  
REVISED: OCTOBER 30, 2019

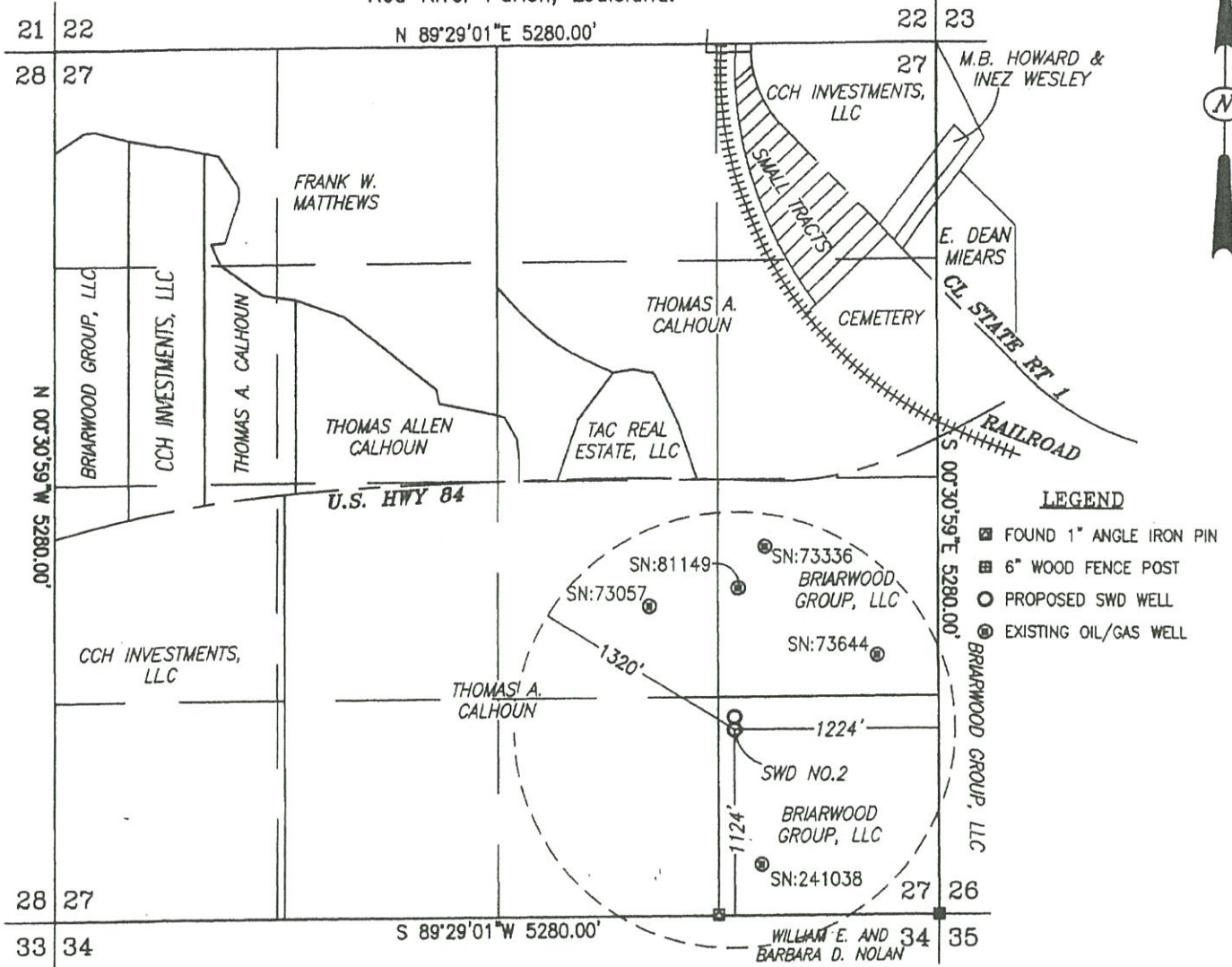
I, Paul W. Culpepper, Professional Land Surveyor, certify that the well location depicted and described in this plat was stated and surveyed in the field by me or under my direction with accuracy and precision to the nearest foot. I have properly examined the survey and plat, and have determined that it meets the minimum standards of practice for land surveying in the State of Louisiana.



SCALE: 1" = 1000'	<b>Landmark Land Surveying, Inc.</b> 114 Pearl St., Minden, Louisiana (318) 371-9100 18-224D
LOCATION: 27-13-11	
DATE: JANUARY 30, 2019	



Section 27, Township 13 North, Range 11 West,  
Red River Parish, Louisiana.



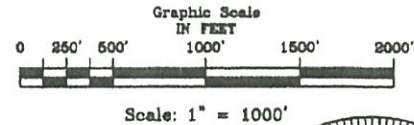
PLAT SHOWING LOCATION

**PA PROSPECT CORPORATION ----- REIMER CALHOUN SWD NO. 002**

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 NAD 27  
 X = 1,696,887.147  
 Y = 515,810.176  
 State Plane Grid, LA North 1701

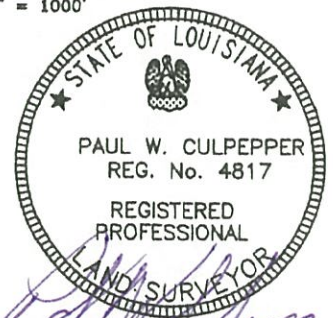
Latitude = 32°04'51.99209" North  
 Longitude = 93°28'43.82597" West  
 Latitude = 32.08110891" North  
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 X = 2,977,673.042  
 Y = 576,517.735  
 State Plane Grid, LA North 1701



Ground Elevation = 138.12  
(NAVD 88)

DATE: FIELD: JANUARY 29, 2019  
 DRAWING: JANUARY 30, 2019  
 REVISED: OCTOBER 30, 2019

*I, Paul W. Culpepper, Professional Land Surveyor, certify that the well location depicted and described in this plat was stated and surveyed in the field by me or under my direction with accuracy and precision to the nearest foot. I have properly examined the survey and plat, and have determined that it meets the minimum standards of practice for land surveying in the State of Louisiana.*



SCALE: 1" = 1000'  
 LOCATION: 27-13-11  
 DATE: JANUARY 30, 2019

**Landmark Land Surveying, Inc.**  
 114 Pearl St., Minden, Louisiana  
 (318) 371-9100  
 18-224D



933

73726

73057

81149

73336

73644

27

PROPOSED REIMER CALHOUN SWD NO. 002

1/4 MILE RADIUS

26

18247

443

241038

34

35

ATTACHMENT 2A  
AREA OF REVIEW

LOCATION

PA PROSPECT CORPORATION (P56603)  
REIMER CALHOUN SWD NO. 002  
NEW WELL  
SECTION 24 T13N R11W  
RED RIVER-BULL BAYOU FIELD  
RED RIVER PARISH, LOUISIANA

LEGEND



NEW WELL



DIRECTIONAL WELL



PERMIT EXPIRED



P&A PRODUCER - OIL



P&A DRY PRODUCER - GAS & CONDENSATE



PROJECT NO. SA03428

SCALE 1" = 350'

PAGE 1 DRAWN BY JKW

SHEET 1 DATE 02/07/2019

A - 8.5 X 11



**FRESHWATER WELL LIST**

A DILIGENT SEARCH WAS MADE TO LOCATE ALL FRESHWATER WELLS WITHIN A 1/4 MILE RADIUS OF THE PROPOSED WELL AND NO WELLS WERE LOCATED

A DILIGENT SEARCH WAS MADE TO LOCATE ALL FRESHWATER WELLS WITHIN A 1/4 MILE RADIUS OF THE PROPOSED WELL AND THE FOLLOWING WELLS WERE LOCATED

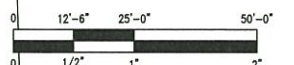
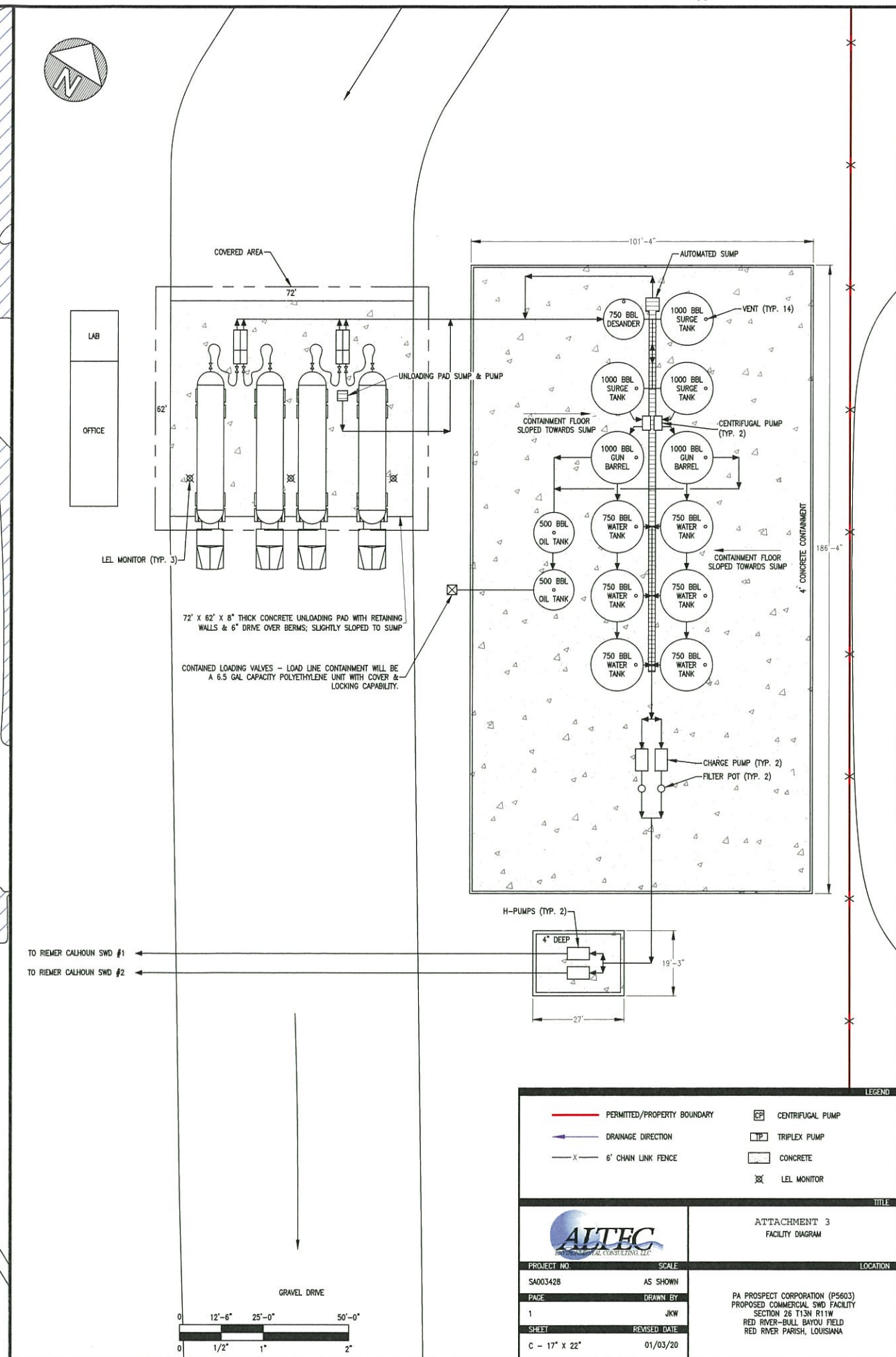
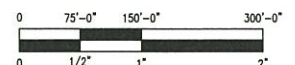
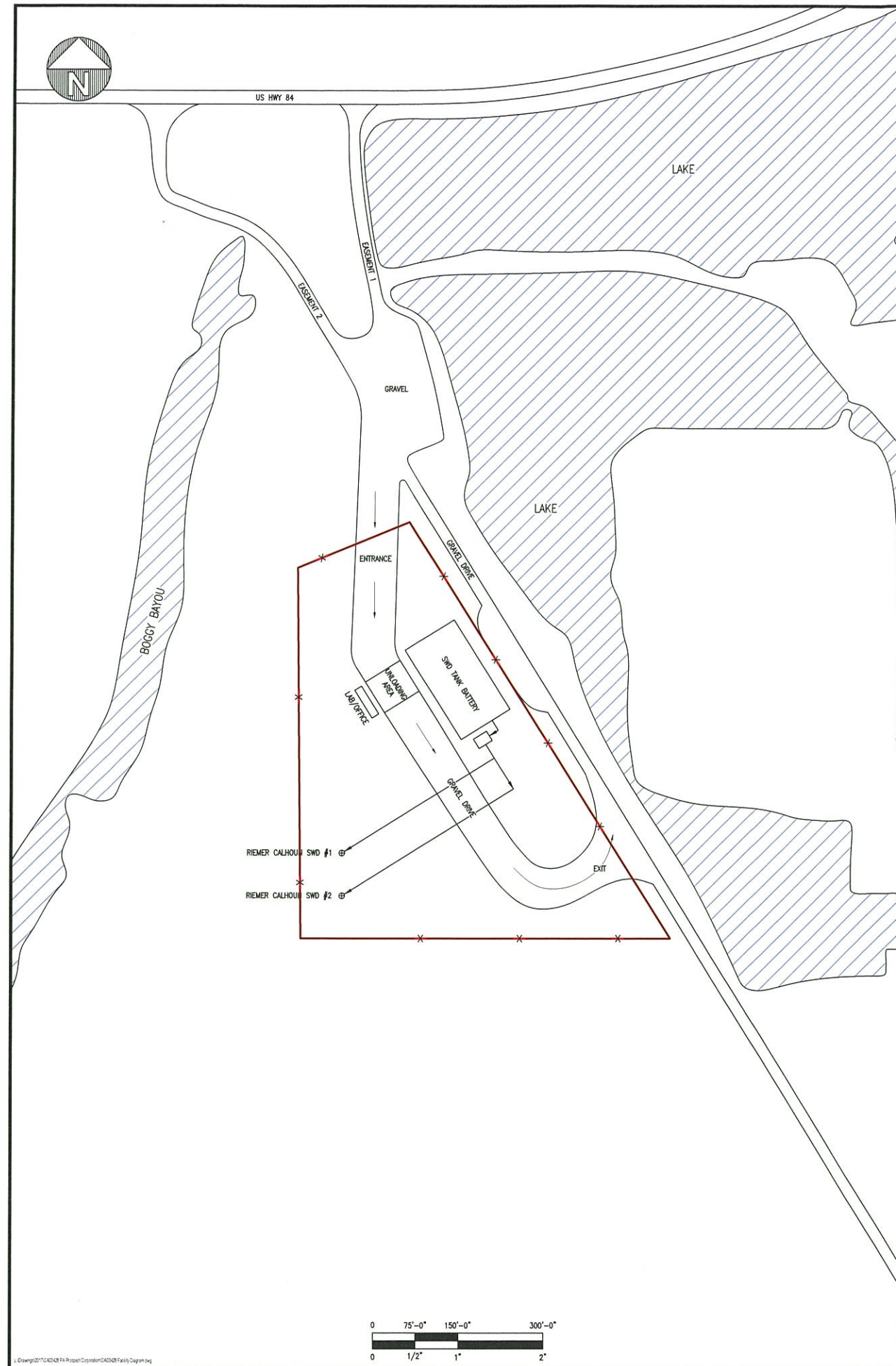
OWNER	WELL NAME	TYPE	STATUS CODE	TOTAL DEPTH	LOCATION	
					LATITUDE	LONGITUDE

\*Type of Well: PUBLIC SUPPLY, DOMESTIC (supplies one or a few homes), INDUSTRIAL (including commercial), LIVESTOCK, IRRIGATION (including catfish & crawfish farming), MONITORING, RIG SUPPLY, HEAT PUMP SUPPLY, OBSERVATION (by a qualified agency or company), AQUIFER DEWATERING, RECOVERY (of contaminants), other (describe).

\*\*Status of Well: ACTIVE (used at least once a month), STANDBY, INACTIVE (but useable with minor work or effort), ABANDONED (but not plugged).

# Water Wells By LATITUDE / LONGITUDE Report

Latitude	Longitude	Radius Ft	MSG	Well Distance Ft	SECTION	TOWNSHIP	RANGE	PARISH_NAM	PARISH_NUM	LOCAL_WELL_#	WELL_US	DESCRIPTION	WELL_STA	OWNERS_NUM	OWNERS_NAM	DRILLERS_NAM	WELL_DEPTH	CASING_DIAMETE	DATE_GO	WATER_LEVEL	DATE_M	WATER_CASURE	GEOLOGIC_UNIT	LATITUDE	LONGITUDE	
32.0603333	-93.4763111	1320	Found 0 records																							

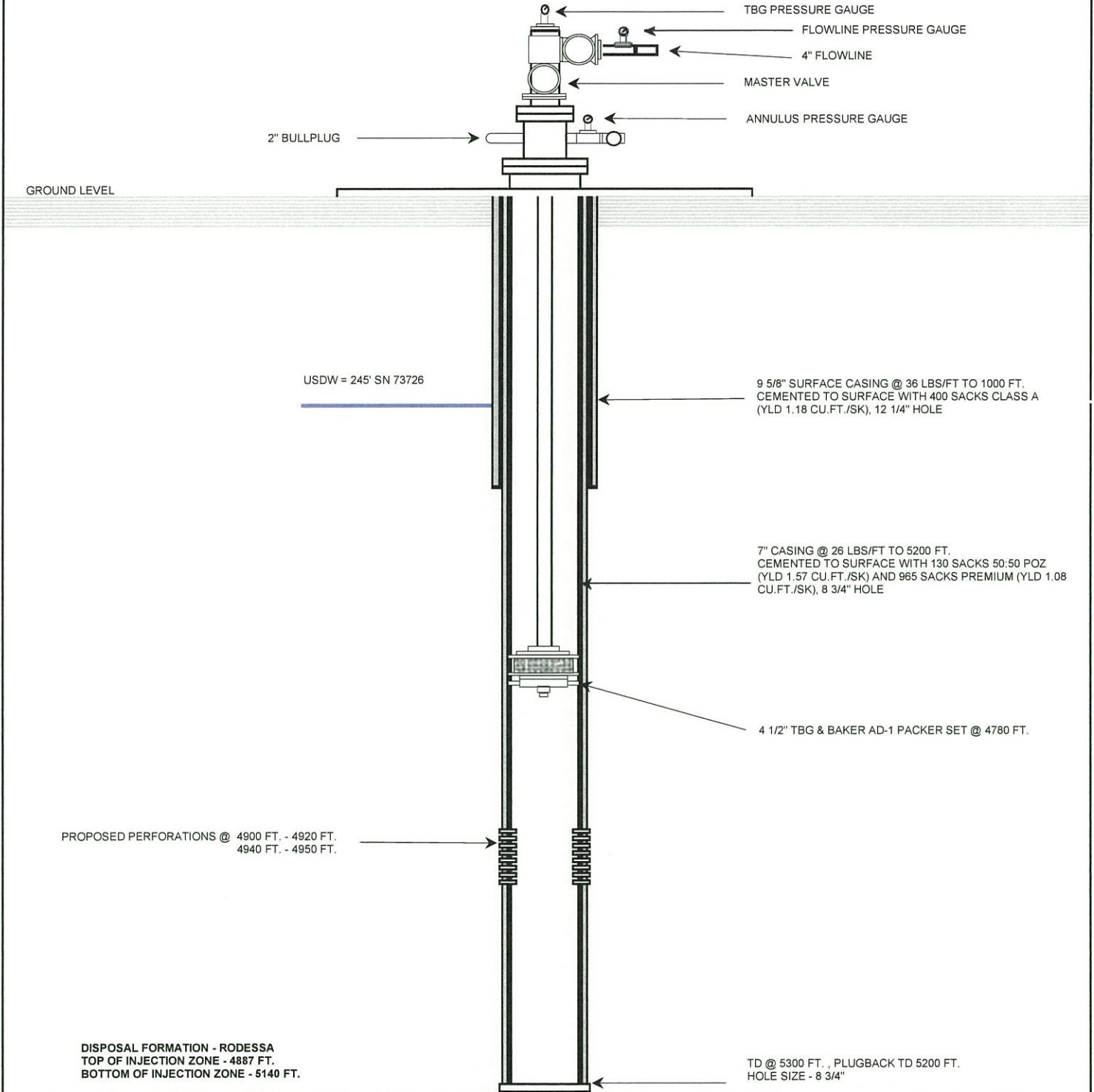


TO RIEMER CALHOUN SWD #1  
TO RIEMER CALHOUN SWD #2

LEGEND	
	PERMITTED/PROPERTY BOUNDARY
	DRAINAGE DIRECTION
	6' CHAIN LINK FENCE
	CENTRIFUGAL PUMP
	TRIPLEX PUMP
	CONCRETE
	LEL MONITOR

TITLE		LOCATION	
 ATTACHMENT 3 FACILITY DIAGRAM			
PROJECT NO.	SCALE		
SA003428	AS SHOWN		
PAGE	DRAWN BY		
1	JKW		
SHEET	REVISED DATE		
C - 17' X 22'	01/03/20	PA PROSPECT CORPORATION (P5603) PROPOSED COMMERCIAL SWD FACILITY SECTION 26 T13N R11W RED RIVER-BULL BAYOU FIELD RED RIVER PARISH, LOUISIANA	

PA PROSPECT CORPORATION (P5603)  
 REIMER CALHOUN SWD NO. 002  
 SECTION 27, TOWNSHIP 13 NORTH, RANGE 11 WEST  
 RED RIVER-BULL BAYOU FIELD (7651)  
 RED RIVER PARISH, LOUISIANA



	PROJECT	SCALE	PA PROSPECT CORPORATION (P5603) REIMER CALHOUN SWD NO. 002 (PROPOSED) SECTION 27, TOWNSHIP 13 NORTH, RANGE 11 WEST RED RIVER-BULL BAYOU FIELD (7651) RED RIVER PARISH, LOUISIANA	ATT. 4A REIMER CALHOUN SWD NO. 002 PROPOSED WELL SCHEMATIC DIAGRAM Revised 6-17-2020
	SA03428	NTS		
	PAGE	DRAWN BY		
	1	CR		
SHEET	DATE			
A	2/12/2019			

PA Prospect Corporation (P5603)  
Reimer Calhoun SWD NO. 002, New Well  
Section 27, Township 13 North, Range 11 West  
Red River-Bull Bayou Field (7651)  
Red River Parish, Louisiana

### WORK PROGNOSIS

1. Notify Louisiana Department of Natural Resources prior to spud and 24 hours prior to cementing all casing strings.
2. Install location sign - make sure sign is in compliance with Louisiana Department of Natural Resources regulations and denotes the well to be an SWD.
3. Move in rig and equipment and rig up.
4. RIH with 12 1/4 in. bit drilling to 1000 ft. Circulate and condition hole. R/U Wireline and run Open Hole/Triple Combo Log (GR/SP/RES) from TD to Surface.
5. Run 9 5/8 in. surface casing, 36 lbs/ft. to 1000 ft. and cement to surface with 400 sacks Class A (Yld 1.18 cu.ft./Sack). WOC 12 hrs. Pressure test casing to a minimum of 1000 psi with not more than 5% loss in pressure in a 30 min. time period to determine casing integrity. Complete and sign Form CSG-T, submit originals upon completion of well (IMD requires the original).
6. Install and Test BOP according to Injection and Mining regulations; LAC 43:XIX.111.A & LAC 43:XIX.111.C.
7. RIH with 8 3/4 in. bit drilling to 5300 ft. Circulate and condition hole. R/U Wireline and run open hole w/triple combo log (GR/SP/RES) from TD through Surface Casing Shoe. Shoot Percussion Sidewall Cores in Proposed Injection Intervals.
8. Run 7 in. longstring casing, 26 lbs/ft. to 5200 ft. and cement to surface with 130 sacks 50:50 POZ (Yld 1.57 cu.ft./Sack) and 965 sacks Premium (Yld 1.08 cu.ft./Sack). WOC 12 hrs. Pressure test casing to a minimum of 1000 psi with not more than 5% loss in pressure in a 30 min. time period to determine casing integrity. Complete and sign Form CSG-T, submit originals upon completion of well (IMD requires the original).
9. Run CBL/VDL/GR from total depth to surface casing. Evaluate cement bond log for possible squeezes. The log must show a minimum of 11 continuous feet of not less than 60% bond across from the first isolating shale immediately above the top of the proposed injection zone and must show evidence of cement below the bottom of the injection zone. The CBL will be submitted to Injection and Mining, Engineering Department prior to perforating and setting the packer in the well to verify adequate cement isolation. If no additional cementing work is required, proceed with constructing the well. If additional cement work is required, perforate and squeeze as required by Injection and Mining Division and re-run the cement bond log after the squeeze. Submit the CBL to the Injection and Mining Division for approval before completing the well.



PA Prospect Corporation (P5603)  
 Reimer Calhoun SWD NO. 002, New Well  
 Section 27, Township 13 North, Range 11 West  
 Red River-Bull Bayou Field (7651)  
 Red River Parish, Louisiana

10. With approval from IMD, R/U Wireline & perforate injection interval from 4900 – 4950 ft. with 6 spf. After perforating; Contact appropriate CES Agent to schedule the fluid level measurement for purposes of calculating the formation pressure. Take a measurement of the reservoir pressure of the injection zone. This pressure can be obtained by direct measurement from a downhole pressure gauge or by taking a static fluid level reading in the well and calculating the pressure at the perforations. This is reported on the UIC-WH1 and is now required in order to receive a permit to inject.
11. Pick up Baker model AD1 packer and go in hole with 4 1/2” tubing & set packer on tension at 4780’. The packer must be set at a depth that is equal to or deeper than the cement in the wellbore that is bonded to the first isolating shale immediately above the approved injection zone. (No higher than 150’ above TOZ)
12. Contact appropriate CES Agent to schedule the Mechanical Integrity Pressure Test (MIPT) and fluid level measurement for purposes of calculating the formation pressure. Pressure test tubing/casing annulus to 400 psi for 30 minutes. A Conservation Enforcement Specialist must be present to witness the test.
13. Submit all required paperwork within 20 days of completing the well as stated in the “Permit to Construct” and wait on “Permit to Inject” approval from IMD before injection and disposal of any fluids.
14. Monitor injection pressure and volumes to stay within the guidelines of the permit.

**Louisiana Office of Conservation – Injection & Mining Division: Cement Bond Logging Guidelines:**

<ol style="list-style-type: none"> <li>1. Gamma-ray curve</li> <li>2. Casing Collar locator</li> <li>3. Travel Time on the 3-foot receiver</li> <li>4. 0-100 mv Amplitude curve</li> </ol>	<ol style="list-style-type: none"> <li>5. X5 or X10 Amplified Amplitude curve (Important)</li> <li>6. Variable Density log (VDL) or Waveform (for pipe within a pipe)</li> <li>7. A free pipe section</li> <li>8. The most recent shop calibration &amp; date</li> </ol>
--	--

# Gulf States Environmental Laboratories

222 Spring St. Shreveport, La. 71101 · 800-256-6110 · 318-220-9067 · Fax 318-221-3296  
LELAP CERTIFICATION # 02082

**Client:** ALTEC ENVIRONMENTAL CONSULTANTS  
10100 WOOLWORTH RD.  
KEITHVILLE, LA 71047

Page 1 of 1

**Report Date:** 02/18/19  
**Sample ID:** SN 240814 SEPERATOR @ WELLHEAD  
**Project Name:** GRAND BAYOU COMMERCIAL SWD  
**Collected By:** CLIENT  
**Time/Date Collected:** 1515 02/04/19  
**Date Received:** 02/04/19

## ANALYTICAL RESULTS

**GSEL ID#:** 107998

### GENERAL CHEMISTRY


**Sample Matrix:** WATER

Analyte:	Result	Units	Qualifier	Reporting Limit	Dil. Factor	Method	Time/Date Analyzed	Analyst
TDS	169,836	mg/L		10.0		SM 2540C	1015 - 02/05/19	MR
CHLORIDE	90,455	mg/L		10.0	10	H 8225	1415 - 02/13/19	MR
SPECIFIC GRAVITY	1.105					ASTMD 1298-99	1722 - 02/07/19	MR
TEMPERATURE	20.1	°C				EPA 170.1	1722 - 02/07/19	MR
pH	4.86	SU				EPA 150.1	1625 - 02/04/19	CY

\*The above results relate only to the items tested.

\*Test reports meet all requirements of LAC 33:1

\*This test report shall not be reproduced except in full, without the written approval of the laboratory.

Approval: 

U - Analyte not on current Scope of Accreditation  
A - Analyte detected in the associated method blank  
B - Estimated value between the detection limit and the reporting limit  
C - Estimated value exceeds the calibration curve  
D - Surrogate recovery outside advisable QC limits

TNTC - Too numerous to count  
E - Surrogate recovery unreportable due to dilution  
F - Matrix interference  
G - Method specific criteria not met  
H - Some of the QC was outside the normal range

01  
ATTACHMENT 5

167998

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

ALTEC ENVIRONMENTAL CONSULTANTS, LLC



10100 WOOLWORTH RD.

KEITHVILLE, LA 71047

Phone # (318) 687-3771

Fax # (318) 687-9923

Project Name:

Grand Bayou Commercial SWD

Project Manager:

Charlie Reynolds

Sampler Name (Print):

Charlie Reynolds

ALTEC's Client:

PA Prospect Corporation

Address:

City & State:

Grand Bayou, LA

PRESERVATIVE / P/	PARAMETERS				TDS	Chlorides	Temp	pH	CUSTODY RECORD					
	2019	Date Sampled	Time Sampled	Received by:					Date:	Time:	Received by:	Date:	Time:	
		2/4	15:5	G	X	X	X	X	N. D. & L.	2-4-19	16:20			

EMAIL RESULTS TO:  
STACI.PRICE@ALTECENV.COM  
CHARLIE.REYNOLDS@ALTECENV.COM

Special Instructions:

TAT  
SA03428

QC Deliverables  
None  
Level 2 (Batch QC)  
Level 3  
Level 4

REMARKS:

Relinquished by:			
Relinquished by:			
Relinquished by:			

Relinquished by: [Signature]

Date: Time: 2/4/19 16:20

Received by: N. D. & L.

# Gulf States Environmental Laboratories

222 Spring Street; Shreveport, LA 71101 Phone: (318) 220-9067 Fax: (318) 221-3296  
LELAP Certification No.: 02083

## SAMPLE RECEIPT FORM

Client: Altec GSEL# 107998

Received By/Date and Time: CO 2-4-19 16:20

Sample Brought in By: Client  GSEL  Other

Temperature: 11.4°C Thermometer ID: IR-1

Logged in By: OC. Oell

- |  |   |                             |   |
|--|---|-----------------------------|---|
| 1. Shipping container/cooler arrive in good condition?   | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Not Present <input type="checkbox"/>              |
| 2. Was sufficient ice used? (If appropriate)             | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |
| 3. Were custody seals intact on sample bottles?          | Yes <input type="checkbox"/>            | No <input type="checkbox"/> | Not Present <input checked="" type="checkbox"/>   |
| 4. Were custody papers (Chain of Custody) with samples?  | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |
| 5. Were custody papers properly filled out?              | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Not Present <input type="checkbox"/>              |
| 6. Were custody papers signed by the client?             | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |
| 7. Were custody papers signed by the lab?                | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |
| 8. Did all sample containers arrive in good condition?   | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |
| 9. Were all container labels complete?                   | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |
| 10. Were correct containers used for requested analysis? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |
| 11. Did all container labels agree with custody papers?  | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |
| 12. Was sufficient sample sent for requested analysis?   | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |
| 13. Were all samples received within holding times?      | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |
| 14. Do VOA vials have zero headspace?                    | Yes <input type="checkbox"/>            | No <input type="checkbox"/> | None Received <input checked="" type="checkbox"/> |
| 15. Was preservation checked upon receipt?               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Initials <u>CO</u>                                |
| *VOA preservation checked after sample analysis.         |   |                             |   |
| *Oil and Grease and TOC checked during sample analysis.  |   |                             |   |
| 16. Was the correct preservative used?                   | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |

Non-Conformance Issues: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

GSEL Rep/Contact Date & Time: \_\_\_\_\_

Person Contacted: \_\_\_\_\_

Client Instructions: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## MASIP CALCULATION REQUEST

(Check the box next to the appropriate request and complete the requested information)

The applicant requests to calculate the Maximum Authorized Surface Injection Pressure (MASIP) **based on the fracture gradient of the injection formation**. As described in the Intra-Office Policy Statement No. IMD 1999-03, the MASIP will be calculated not to exceed 90% of the calculated fracture pressure of the injection zone based on the Eaton's Correlation of 9 ppg formation fluid. The following information has been provided:

- The specific gravity of the injection fluid is 1.105, as reported in Attachment 6 - Fluid Source Analyses.
- The top of the proposed perforations is 4900 feet, as given in item No. 21 of the Form UIC-2 SWD application.
- An area of review of **one-quarter (1/4) mile** (1,320 feet) has been conducted and all of the wells located within a radius have been identified in Attachment 2B. Each well in the AOR will be evaluated for deficiencies. If deficiencies exist, the well(s) will be properly plugged and abandoned or remediated using another approved corrective action plan to protect the USDW.

The signature provided at the bottom of this page certifies the applicant understands this requirement.

The applicant requests to calculate the MASIP **based on the fracture gradient of the confining formation**. As described in Intra-Office Policy Statement No. IMD-GS-09, the MASIP will be calculated by limiting the pressure at the depth of injection to 75% the pressure needed to fracture the confining formation. The following information has been provided:

- The specific gravity of the injection fluid is \_\_\_\_\_, as reported in the fluid source analyses (Attachment 6).
- The top of the proposed perforations, \_\_\_\_\_ feet, as given in item No. 22 of the Form UIC-2 SWD application.
- The geomechanical data of the confining zone above the proposed injection zone  has been  will be derived from one of the following methods:
  - Subsurface acquisition and testing of the confining beds,
  - Wireline logging to generate mechanical properties,
  - Leak-off testing of the confining beds using fluid with timed velocity, or
  - Other acceptable procedure:

The results of the proposed procedure  have been submitted as Attachment 7A,  will be submitted prior to issuance of a permit to inject for the proposed well.

• An area of review of **one-half (1/2) mile** (2,640 feet) has been conducted and all of the wells located within the radius have been identified in Attachment 2B. Each well in the AOR will be evaluated for deficiencies. If deficiencies exist, the well(s) will be properly plugged and abandoned or remediated using another approved corrective action plan to protect the USDW.

• The proposed top of the injection zone is approximately 4850 feet from the base of the USDW. If the difference between the top of the proposed injection zone and base of the USDW is less than 1,000 feet, then the MASIP will be based on a surface pressure gradient not to exceed 0.25 psi/ft., calculated with respect to the top of the proposed perforations or the top of the open-hole completion.

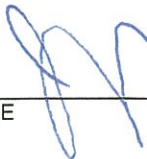
• The surface casing is set at least 100 feet below the base of the USDW.

• A groundwater monitoring plan has been submitted as Attachment 7B and includes all the following provisions:

- Installation of a monitoring well or wells, that is screened or perforated at the base of the USDW.
- Collection of fluid from the monitoring well or wells, which will be sampled by a third party and analyzed by a LDEQ, LEAP accredited laboratory on a quarterly basis for:
  - Chlorides
  - BTEX
  - Temperature
  - Total dissolved solids
  - Specific gravity
  - pH
- Collection of a fluid level in the monitoring well or wells on a monthly basis.
- Submission of a quarterly report, which includes all laboratory analytical data and fluid level measurements. The report will be submitted to the Injection and Mining Division within 30 days of the end of the quarter in which the sampling and measurements were performed. It is understood that failure to file reports or delinquent filings will result in enforcement actions.

The signature provided below certifies the applicant understands this requirement.

OPERATOR'S SIGNATURE



DATE

2-6-19



Applications 40928 & 40930

PARISH RED RIVER  
 FIELD BULL BAYOU  
 WELL RIEMER CALHOUN  
 FEE NO 9  
 COMPANY RIEMER CALHOUN

COMPANY RIEMER CALHOUN  
 Well # 73726  
 WELL RIEMER CALHOUN FEE  
 NO. 9

FIELD BULL BAYOU  
 LOCATION SEC. 27-T13N-R11W

PARISH RED RIVER  
 STATE LOUISIANA

OTHER SURVEYS  
 8-73726

WELL LOCATION  
 2345' N &  
 1932' W of  
 SE Corner of Sec.  
 Elevation KB  
 DF  
 GL

FILE NO. S-610

MEASUREMENTS TAKEN FROM K.B. OR 5' ABOVE 85/8" CASING COLLAR

Run No.	1	2	3	4	5
First reading	2539				
Last reading	122				
Feet measured	2417				
Casing, Lane-Wells	122				
Casing, Driller	122				
Bottom, Lane-Wells	2540				
Bottom, Driller	2538				
Max. temp. °F	105				
Mud characteristics	@ 5.2, °F @	@ °F @	@ °F @	@ °F @	@ °F @
Resistivity	12.0				
Resist. BHT	6.1				
Nature	Native				
Density	9.2				
Viscosity	3.9				
Water Loss-cc 30 min.					
Mud Ph.					
It size	7 7/8"				
Packings					
Short normal	16"				
Long normal	64"				
Lateral	216"				
g time	4.5 Min.				
Recorded by	Harper P 23				
Witnessed by	Messrs. Long & Calhoun				
Date	2-2-59				



REMARKS OR OTHER DATA

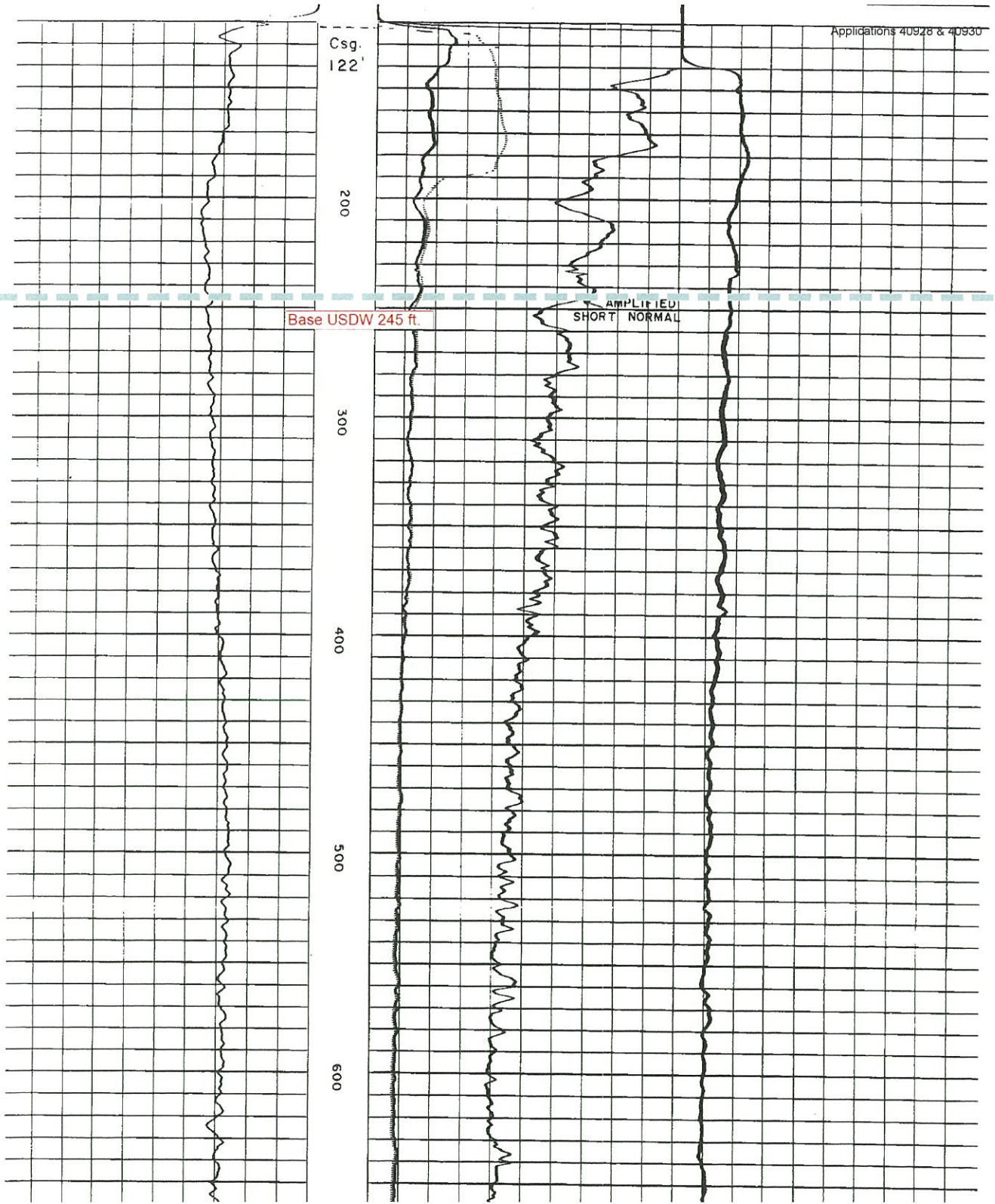
Mud Pit Sample probably Contaminated by Rain Water.

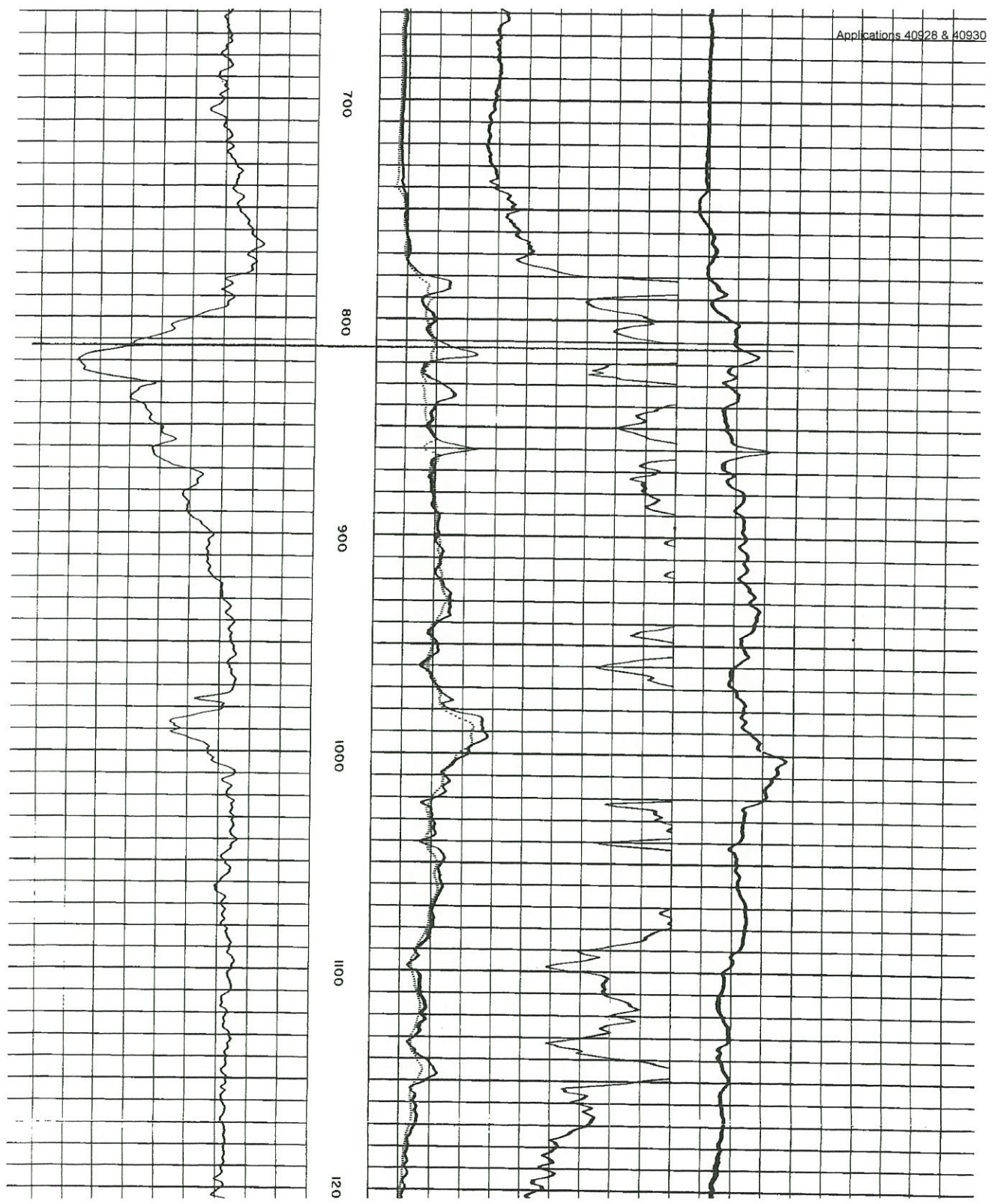
FILE NO. 11

7,146 73726

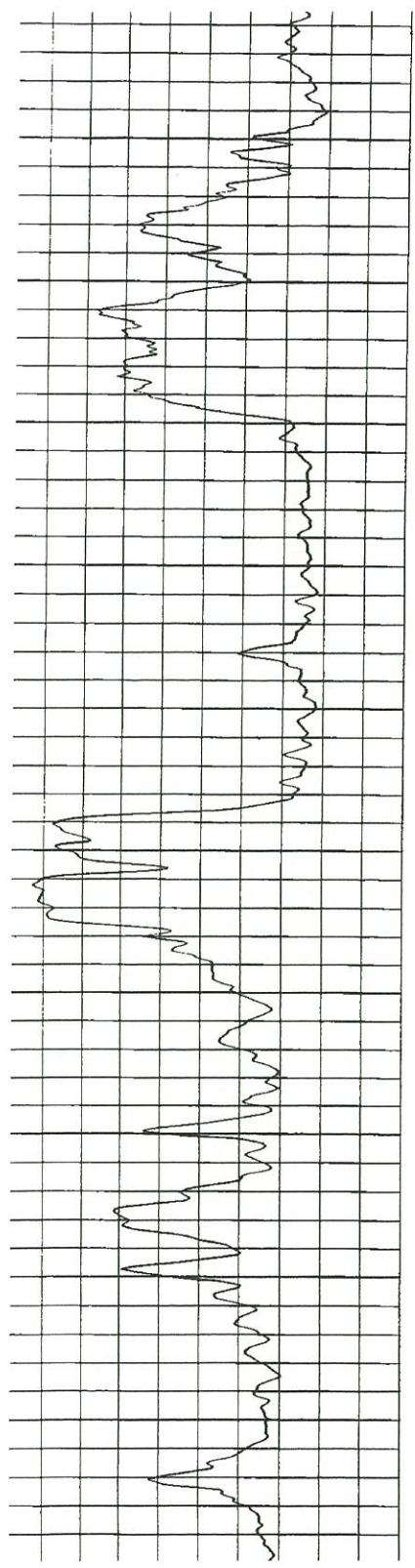
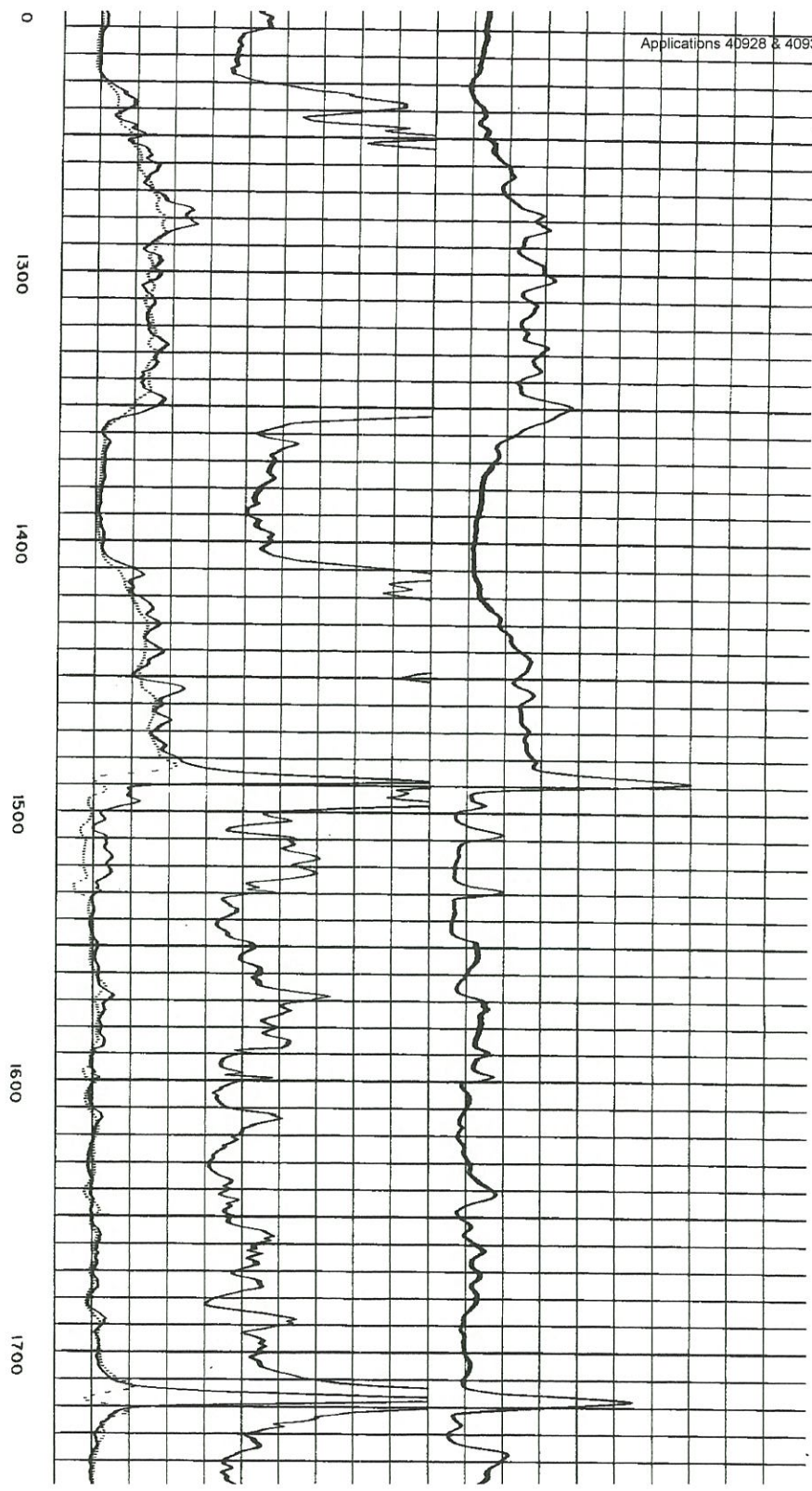
POTENTIAL MILLIVOLTS	Depth	RESISTIVITY OHM-METERS	RESISTIVITY OHM-METERS
		Short Normal AM-16"	Lateral AO-216"
$\frac{-10}{+}$	20	20	200
	200		
	Long Normal AM-64"		
	200		
	Amplified Short Normal	4	

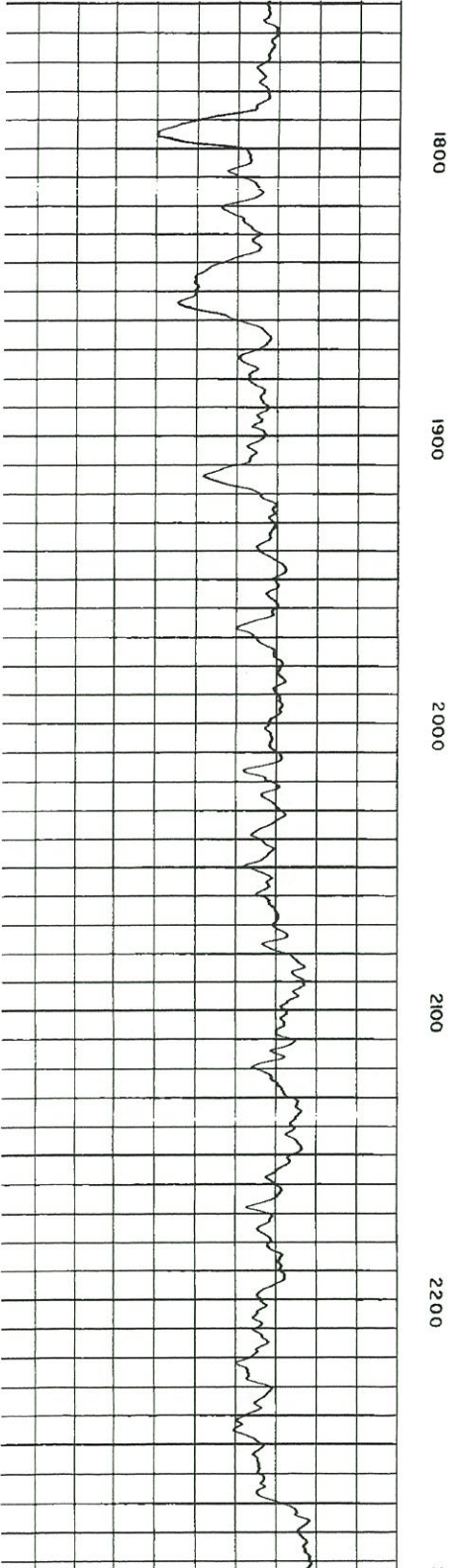
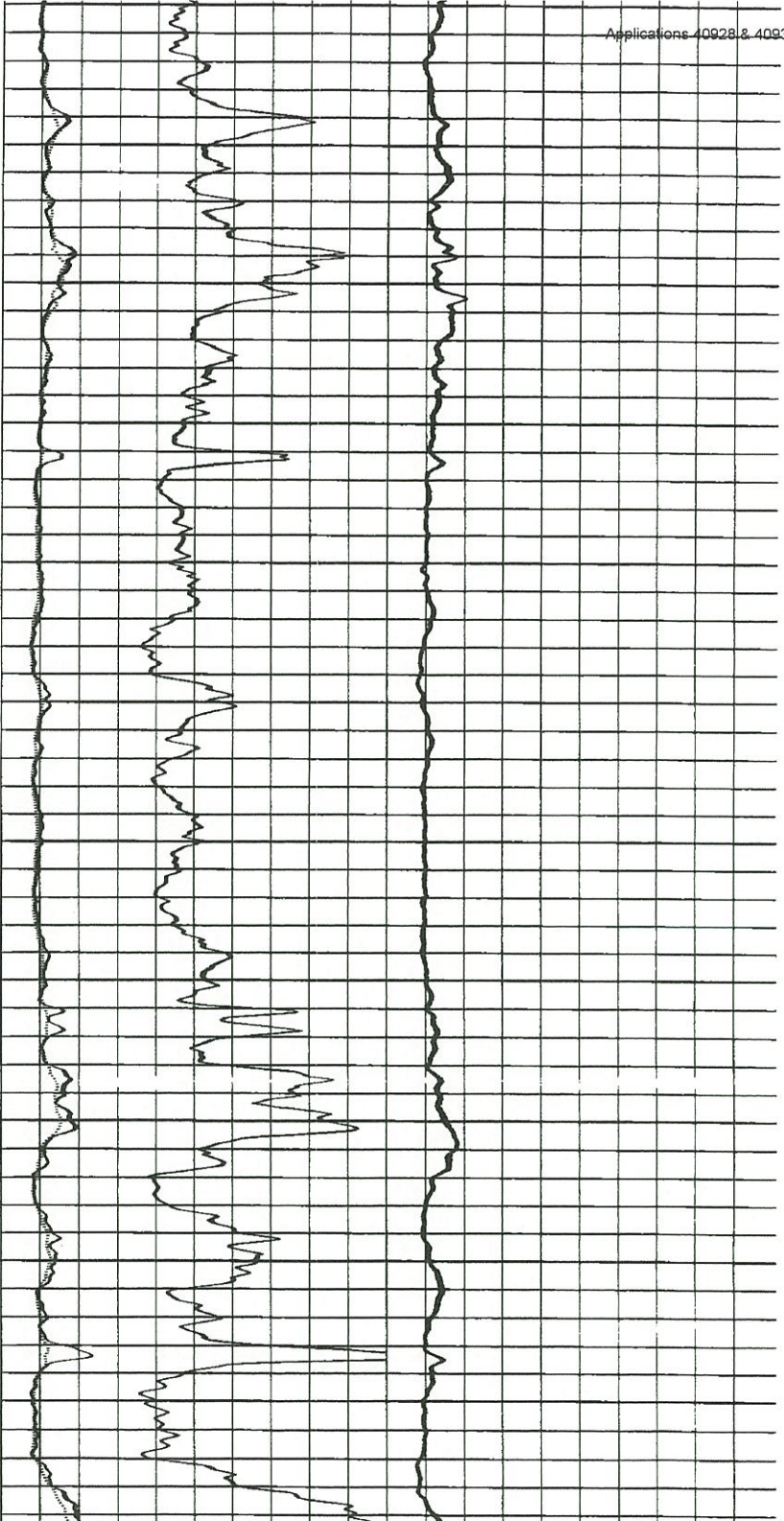
122 / 1

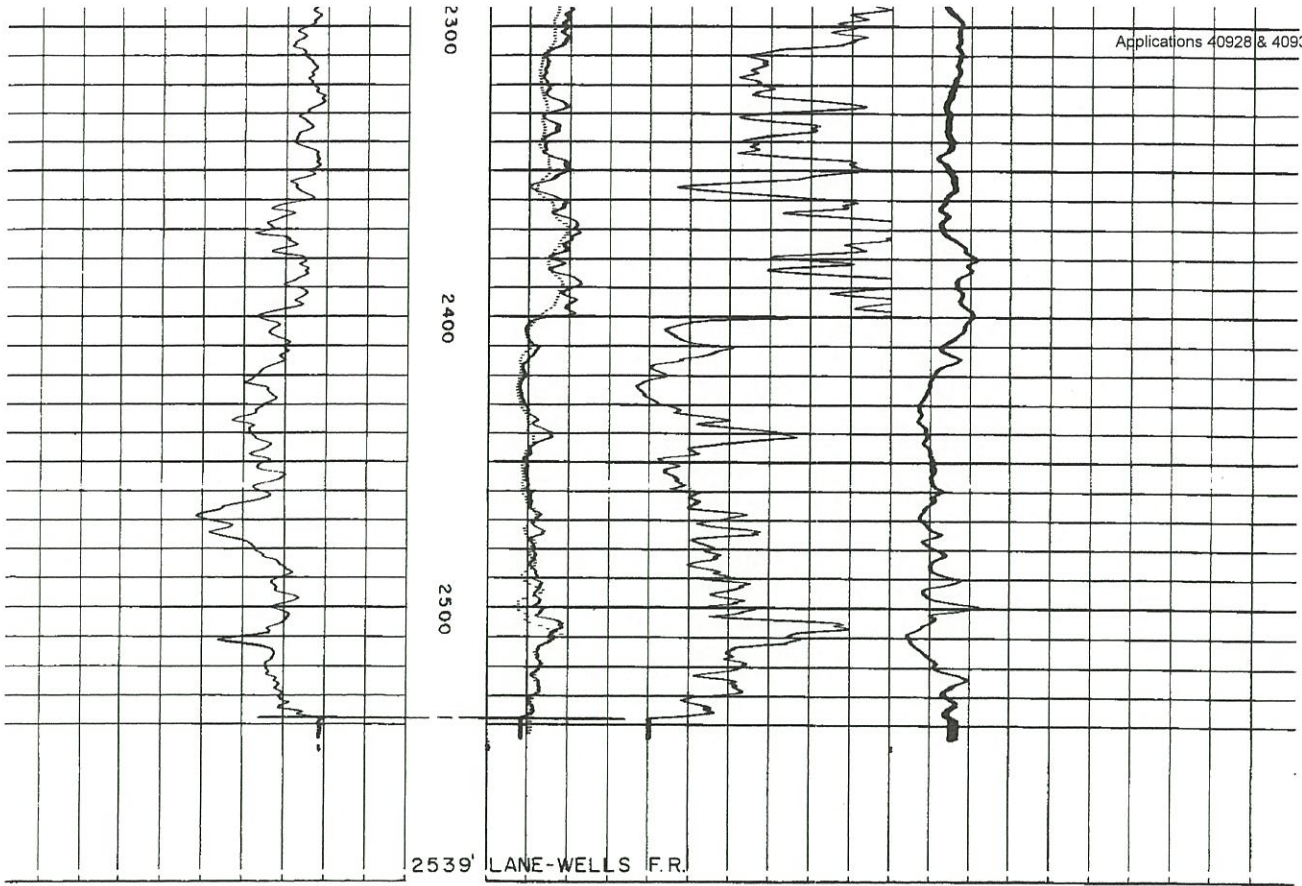












RIEMER CALHOUN  
RIEMER CALHOUN FEE NO. 9

**CONFIDENTIAL**

SN 232902  
 FROM: 7-18-06 (REV)  
 UNIT: 7-18-07

SIM - ANEUS TRIPLE  
 INDUCTION/MICRORESISTIVITY  
 DENSITY / NEUTRON LOG

**COMPANY** ARK-LA-TEX ENERGY, LLC.  
**WELL** RCSR LLC #1  
 RED RIVER - BULL BAYOU  
 RED RIVER  
 LOUISIANA

**COMPANY** ARK-LA-TEX ENERGY, LLC.  
**WELL** RCSR LLC #1  
 RED RIVER - BULL BAYOU  
 RED RIVER  
 STATE LOUISIANA

**Location** 1895' FSL & 1975' FML  
 DF SEC 27  
 LAT: 32.08326N, LONG: 93.48598W

**APR 170812086** S/N 232902  
 REC 27 TWP13N RGE11M  
 ELEV. K.B. 149 ft  
 D.F. 148 ft  
 G.L. 137 ft

**Other Services:**  
 SFT  
 SMC

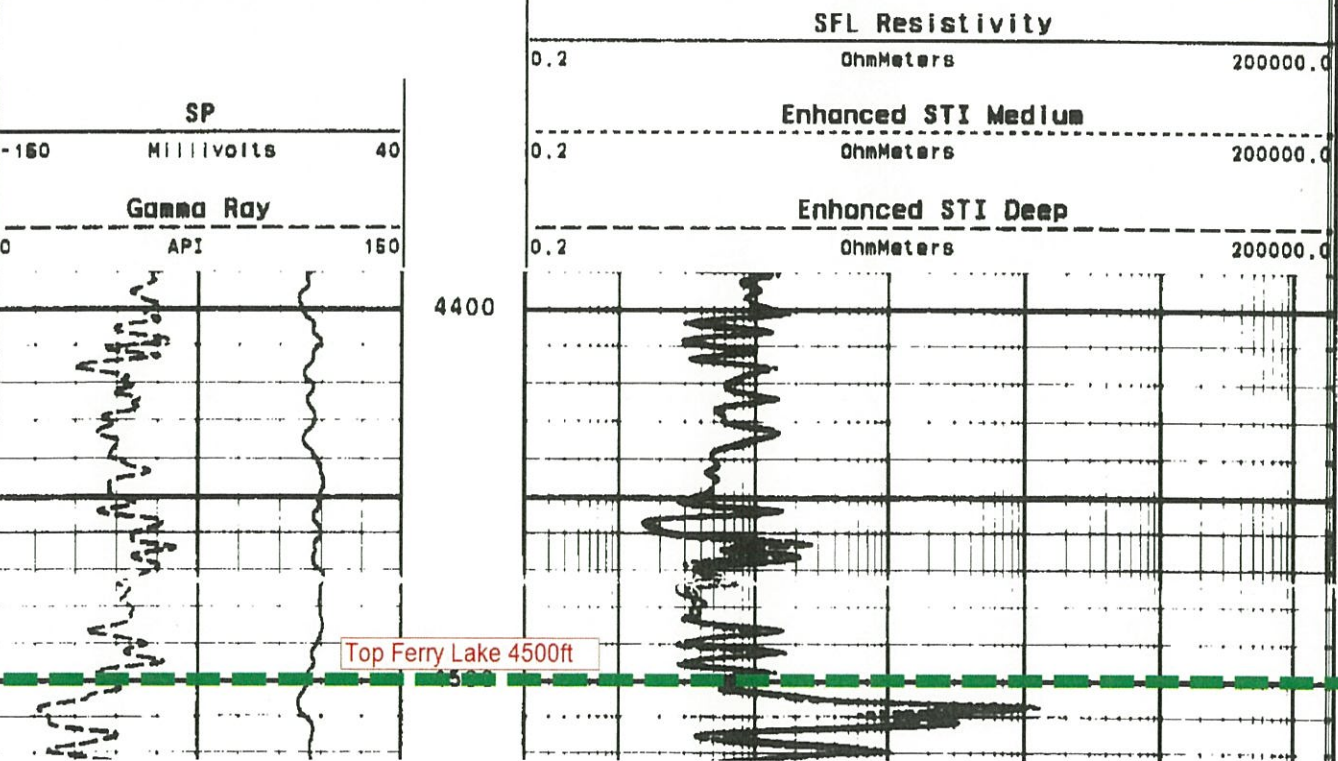
<b>Date</b>	JN-20	<b>Run No.</b>	9212 ft.
<b>Bot. Drill</b>	Log98	<b>Log98</b>	3201 ft.
<b>Log Readings</b>	9154 ft.	<b>Log98</b>	3201 ft.
<b>Log Readings</b>	7339 ft.	<b>Log98</b>	3201 ft.
<b>Log Interval</b>	8.625 in. @ 1809 ft.	<b>Log98</b>	3201 ft.
<b>CS9 - Driller</b>	1799 ft.	<b>Log98</b>	3201 ft.
<b>CS9 - Logger</b>	7.875 in.	<b>Log98</b>	3201 ft.
<b>Fluid Type</b>	DISPERSED	<b>Log98</b>	3201 ft.
<b>Dens. Visc.</b>	10.8 lbm/gal   58 S	<b>Log98</b>	3201 ft.
<b>PH Fluid Loss</b>	9.7	<b>Log98</b>	3201 ft.
<b>Scal. Se Science</b>	Flowline	<b>Log98</b>	3201 ft.
<b>Rm. (at) - heads</b>	0.5 ohm @ 80 °F	<b>Log98</b>	3201 ft.
<b>Rm. (at) - heads</b>	0.4 ohm @ 80 °F	<b>Log98</b>	3201 ft.
<b>Rm. (at) - heads</b>	0.7 ohm @ 80 °F	<b>Log98</b>	3201 ft.
<b>Rm. (at) - heads</b>	0.2 ohm @ 235 °F	<b>Log98</b>	3201 ft.
<b>Rm. (at) - heads</b>	0.1 ohm @ 235 °F	<b>Log98</b>	3201 ft.
<b>Temp</b>	06/26/06 - 0030 hrs.	<b>Log98</b>	3201 ft.
<b>Temp</b>	23 °F	<b>Log98</b>	3201 ft.
<b>Temp</b>	3 hrs.	<b>Log98</b>	3201 ft.
<b>Temp</b>	359 TYLER	<b>Log98</b>	3201 ft.
<b>Temp</b>	OPREA	<b>Log98</b>	3201 ft.
<b>Temp</b>	ELLER	<b>Log98</b>	3201 ft.
<b>Temp</b>	N. GUENO	<b>Log98</b>	3201 ft.
<b>Temp</b>	J. SIMPSON	<b>Log98</b>	3201 ft.
<b>Temp</b>	E. FLETCHER	<b>Log98</b>	3201 ft.

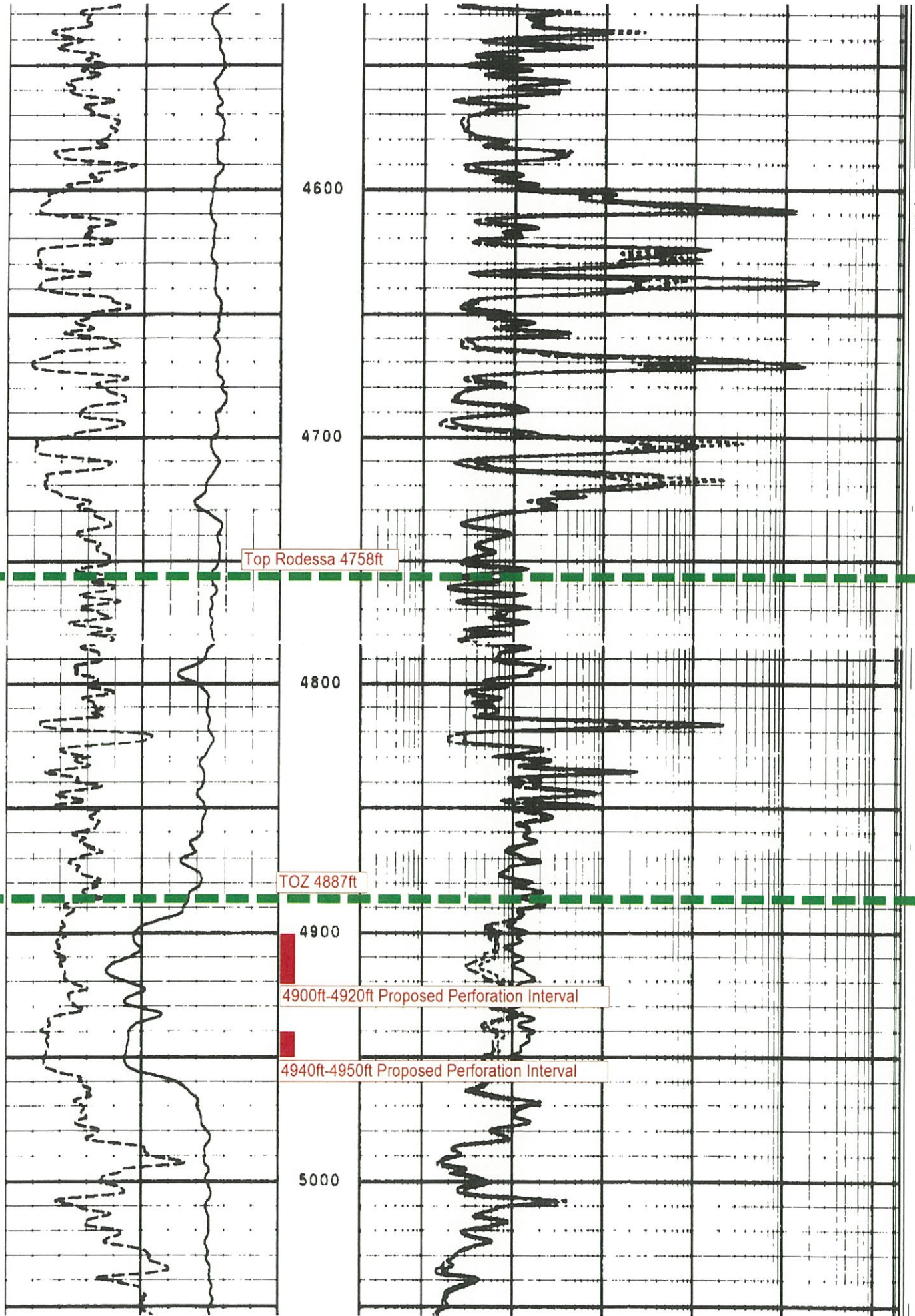
**RECEIVED**

OFFICE OF CONSERVATION  
 SHREVEPORT LA

JUL 19 2006

JUL 24 2006





4600

4700

Top Rodessa 4758ft

4800

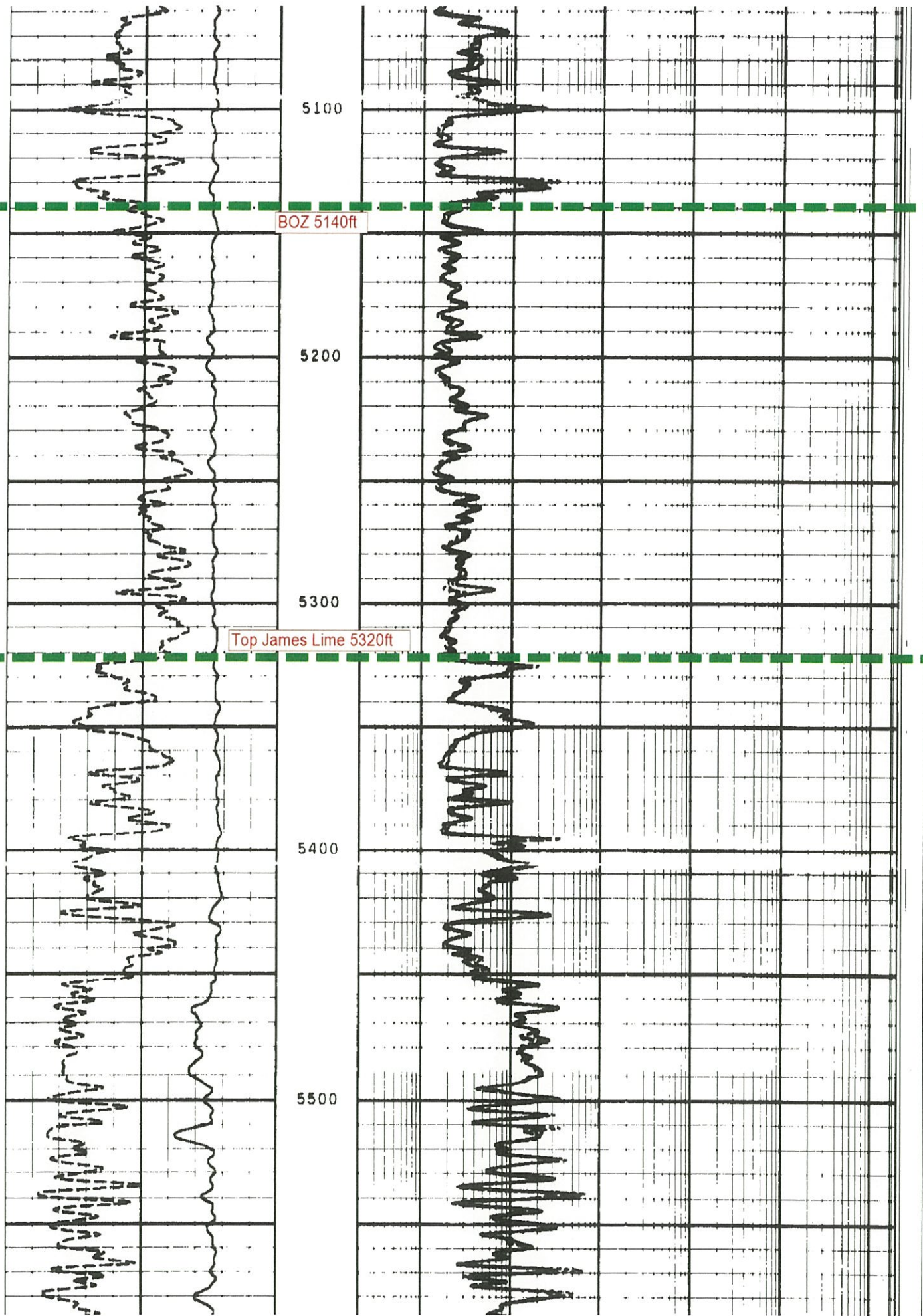
TOZ 4887ft

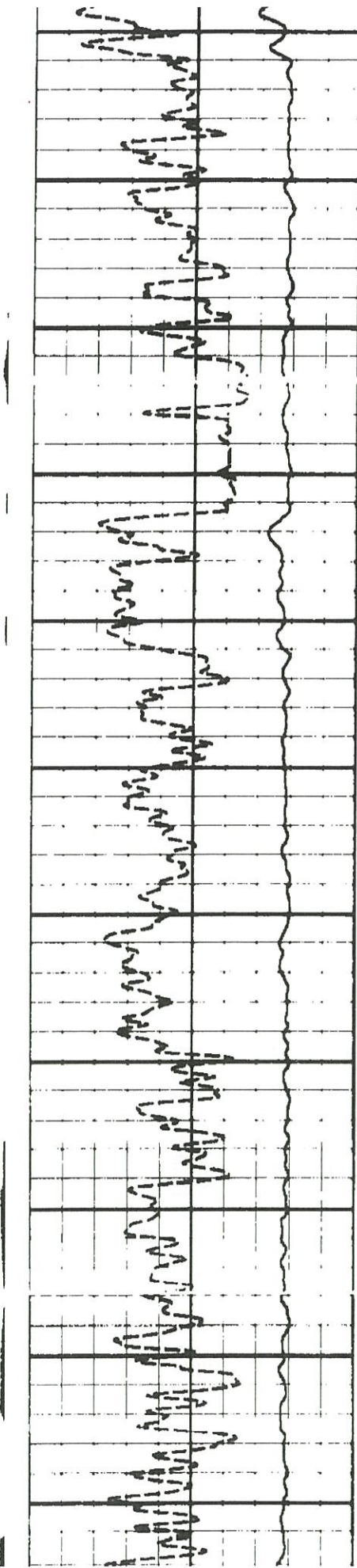
4900

4900ft-4920ft Proposed Perforation Interval

4940ft-4950ft Proposed Perforation Interval

5000





5600

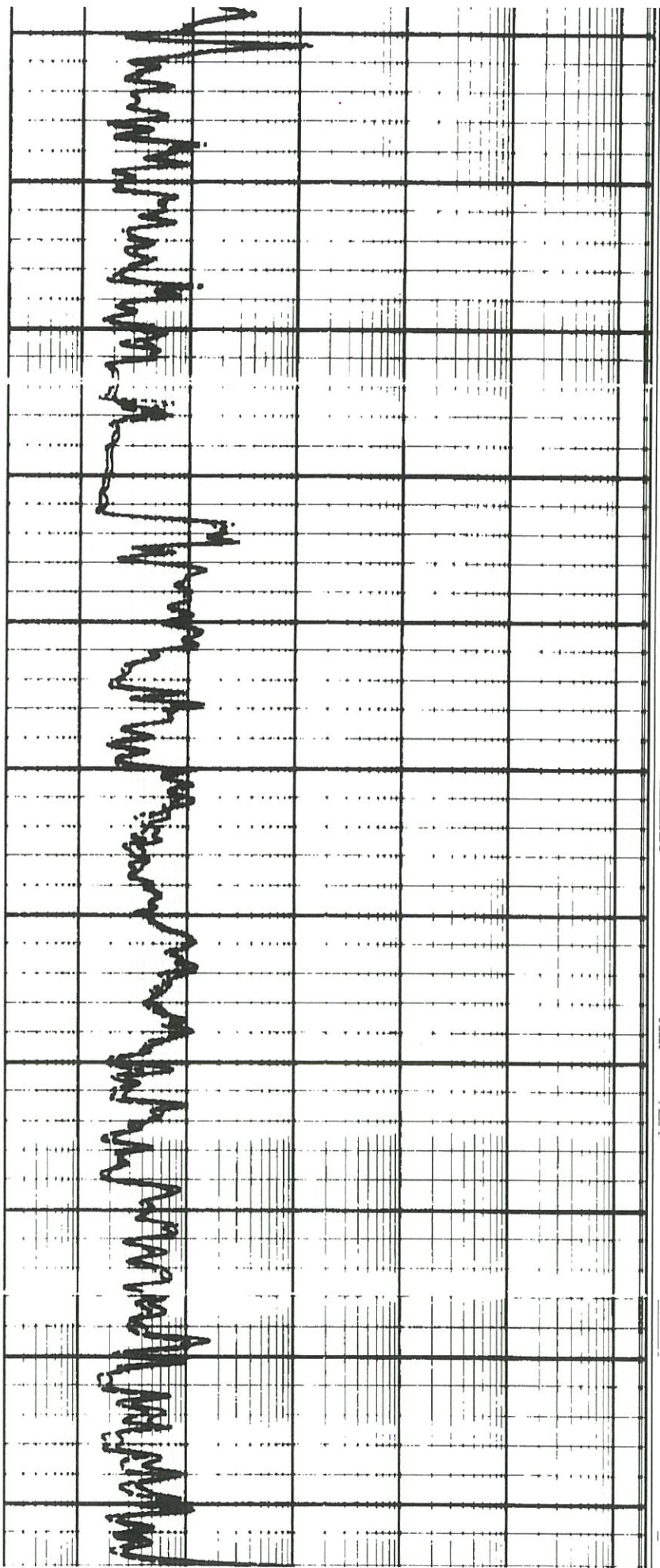
5700

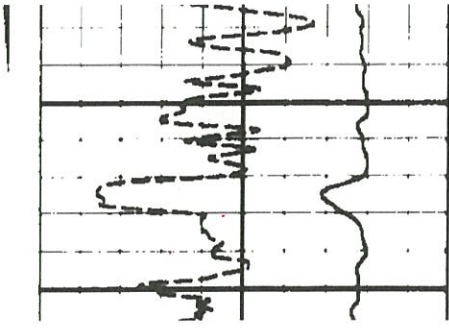
5800

5900

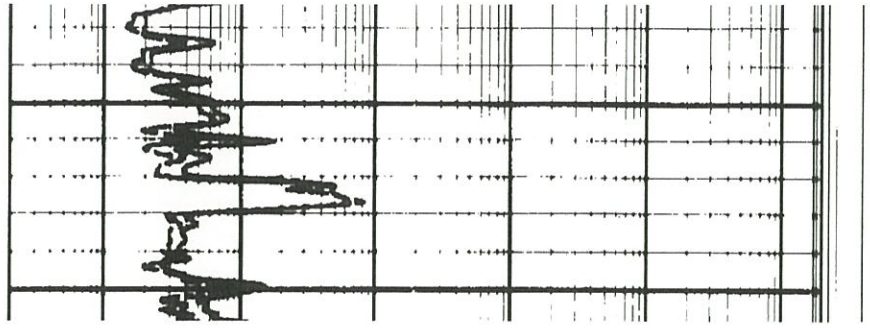
6000

6100





6200



Printed with PreView™

**Weatherford**

111408585 (1)



**APPENDIX N – CLOSURE FUNDING*****Closure plan and cost estimate {Section 519.C.14.(a)}***

PA Prospect Corporation will maintain a Surety Bond to be on file with the Office of Conservation to provide for adequate closure of the PA Prospect Corporation Commercial SWD Well Facility.

Following is a description of the closure plan, cost estimate, and verification that these documents were provided by an independent professional consultant.

***Draft documentation of closure funding {Section 519.C.14.(b)}***

Following the closure plan, cost estimate, and verification is draft documentation of closure funding.



**PA PROSPECT CORPORATION (P5603)**

P.O. Box 785  
Columbus, MT 59019  
(406) 322-9951

**Proposed  
Closure Plan  
& Cost Estimate  
Update**

**For  
PA PROSPECT CORPORATION (P5603)**

**REIMER CALHOUN SWD FACILITY  
Section 27, T13N – R11W  
Red River-Bull Bayou Field (7651)  
Red River Parish, Louisiana**

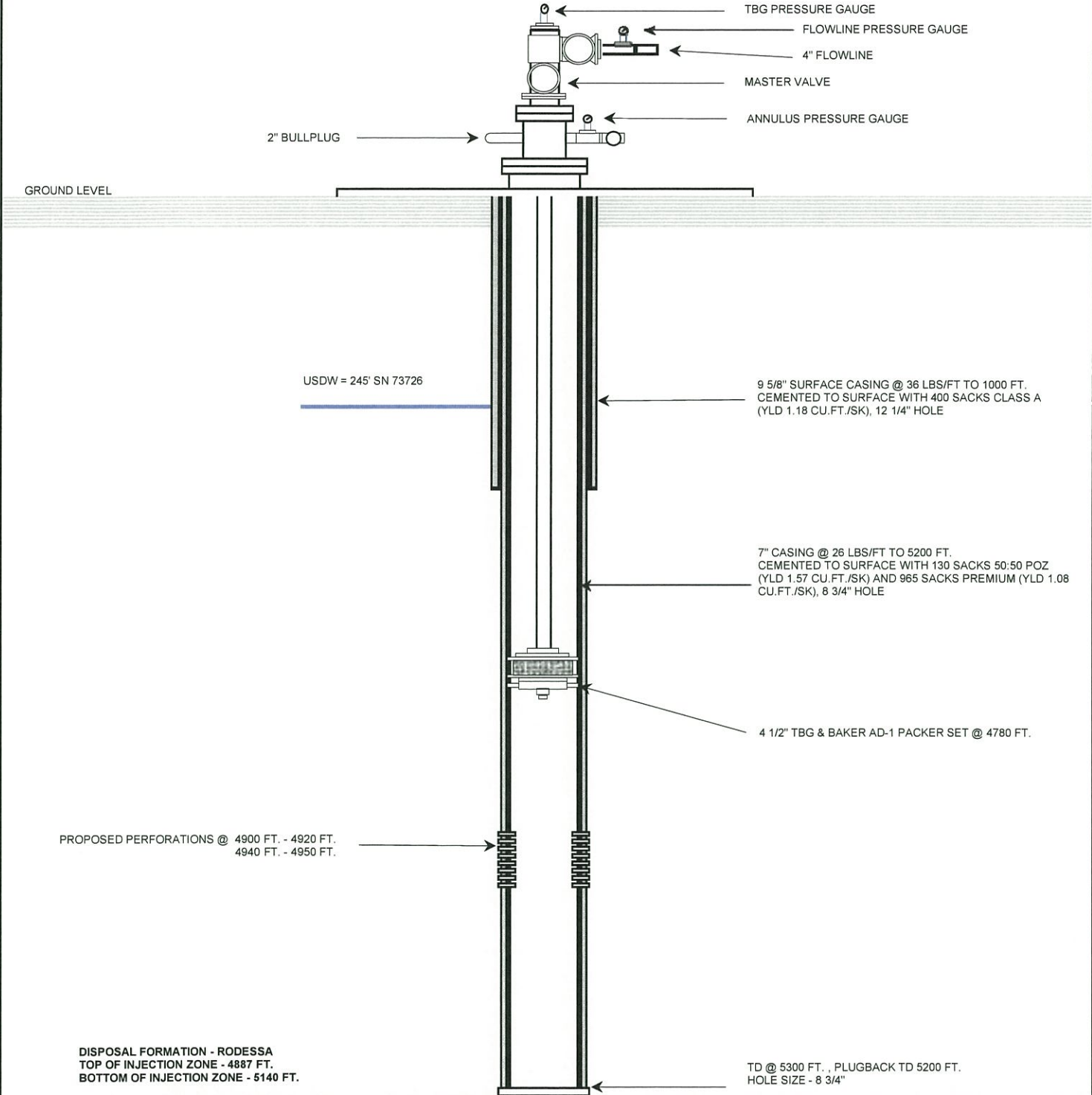
**By  
Charlie Reynolds  
ALTEC Environmental Consulting, LLC  
February 2019**

**PA PROSPECT CORPORATION  
REIMER CALHOUN SWD NO. 001, NEW WELL  
RED RIVER PARISH, LOUISIANA**

**Plugging and Abandoning Procedure – Reimer Calhoun SWD No. 001**

1. Contact Conservation Enforcement Specialist (CES) agent to witness plugging and abandoning procedure.
2. Pressure test casing/tubing annulus. Bleed off pressure in both annulus and tubing. Use weighted fluid to kill well if necessary.
3. Pull wellhead and surface equipment to remove injection string – (4 1/2" tubing). Release tension packer and pull 4 1/2 in. tubing.
4. Run and set retainer at 4895 ft. Run 2 7/8 in. tubing and string into retainer. Break down formation.
5. Squeeze perforations with 150 sacks of Class A (Yld 1.18 cu.ft./sk) cement or until locks up. Spot 200 ft. of cement on top of retainer (PBSD 4695') with 38 sacks of Class A (Yld 1.18 cu.ft./sk). Wait 12 hours on cement.
6. Go in hole and tag cement. Pressure test to a minimum of 300 psi without more than 5% loss in pressure in a 30 min. period.
7. Pump 10#/gal mud on top of cement plug within wellbore.
8. Spot 200' cement plug from 1100 ft. – 900 ft. with 38 sacks of Class A cement (100' inside and outside surface casing). Wait 12 hours on cement.
9. Go in hole and tag cement. Pressure test plug to a minimum of 300 psi without more than 5% loss in pressure within a 30 min. period.
10. Pump 10#/gal mud on top of cement plug in wellbore.
11. Spot 100' cement plug from 195 ft. – 295 ft. with 20 sacks of Class A cement (50' inside and outside USDW @ 245 ft.). Wait 12 hours on cement.
12. Go in hole and tag cement. Pressure test plug to a minimum of 300 psi without more than 5% loss in pressure within a 30 min. period.
13. Pump 10#/gal mud on top of cement plug in wellbore.
14. Spot 100 ft. cement plug from 105' – 5' with 20 sacks of Class A cement.
15. Cut all casing 5 ft. below ground surface. Weld ½ in. steel plate on each casing string. Weld SN and P&A date on top of plate.
16. Cover steel plate and remediate area, restoring location.

PA PROSPECT CORPORATION (P5603)  
 REIMER CALHOUN SWD NO. 001  
 SECTION 27, TOWNSHIP 13 NORTH, RANGE 11 WEST  
 RED RIVER-BULL BAYOU FIELD (7651)  
 RED RIVER PARISH, LOUISIANA



	PROJECT	SCALE	PA PROSPECT CORPORATION (P5603) REIMER CALHOUN SWD NO. 001 (PROPOSED) SECTION 27, TOWNSHIP 13 NORTH, RANGE 11 WEST RED RIVER-BULL BAYOU FIELD (7651) RED RIVER PARISH, LOUISIANA	ATT. 4A REIMER CALHOUN SWD NO. 001 PROPOSED WELL SCHEMATIC DIAGRAM Revised 6-17-2020
	SA03428	NTS		
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SHEET	DATE			
A	2/12/2019			

**PA PROSPECT CORPORATION (P5603)  
REIMER CALHOUN SWD NO. 001  
SECTION 27, TOWNSHIP 13 NORTH, RANGE 11 WEST  
RED RIVER-BULL BAYOU FIELD (7651)  
RED RIVER PARISH, LOUISIANA**

GROUND LEVEL

Cut all casing 5' below ground level. Weld 1/2" steel plate on each casing string. Weld SN and P&A date on top of plate. Cover Wellhead and remediate area around wellhead. Restore Location.

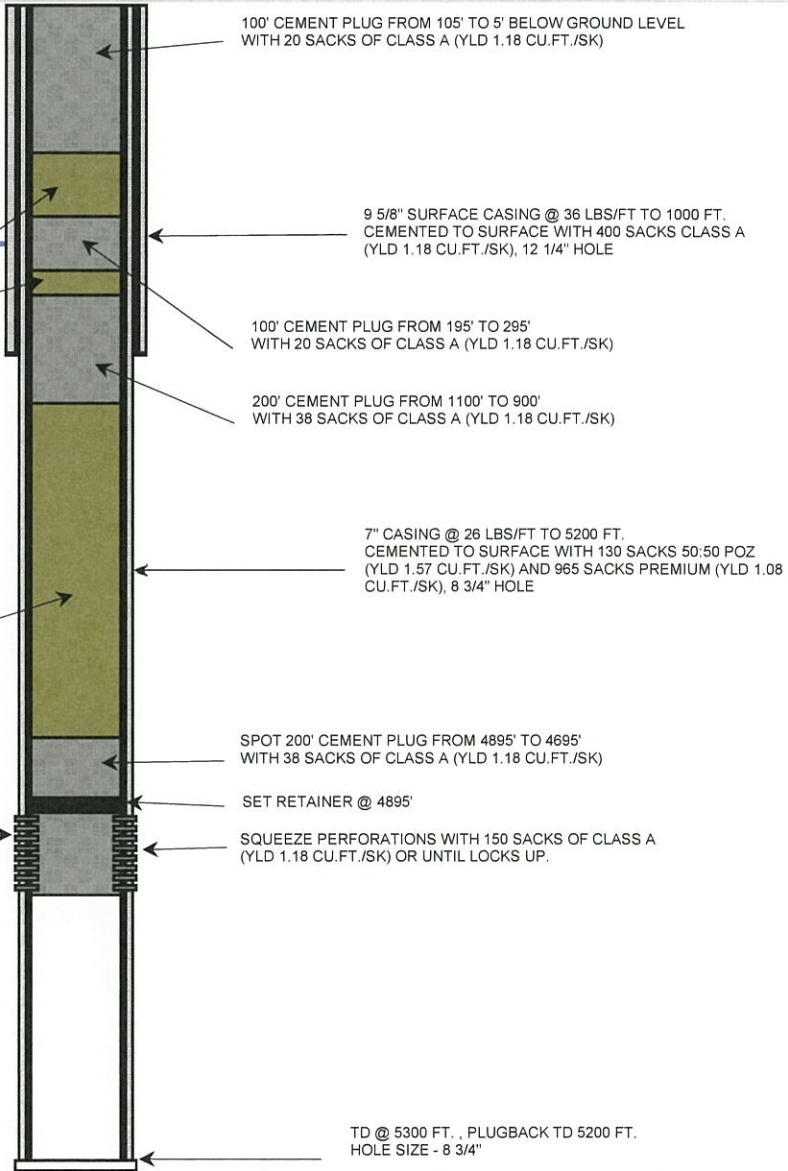
USDW = 245' SN 73726

FILL WELLBORE WITH 10#/GAL MUD ON TOP OF CEMENT PLUG.

FILL WELLBORE WITH 10#/GAL MUD ON TOP OF CEMENT PLUG.

PERFORATIONS @ 4900 FT. - 4920 FT.  
4940 FT. - 4950 FT.

DISPOSAL FORMATION - RODESSA  
TOP OF INJECTION ZONE - 4887 FT.  
BOTTOM OF INJECTION ZONE - 5140 FT.



PROJECT	SCALE
SA03428	NTS
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A	2/12/2019

PA PROSPECT CORPORATION (P5603)  
REIMER CALHOUN SWD NO. 001 (PROPOSED)  
SECTION 27, TOWNSHIP 13 NORTH, RANGE 11 WEST  
RED RIVER-BULL BAYOU FIELD (7651)  
RED RIVER PARISH, LOUISIANA

**APPENDIX N  
REIMER CALHOUN SWD NO. 001  
PROPOSED P&A  
SCHEMATIC DIAGRAM  
ATTACHMENT 9  
Revised 6-17-2020**

**PA PROSPECT CORPORATION  
REIMER CALHOUN SWD NO. 001, NEW WELL  
RED RIVER PARISH, LOUISIANA**

**Closure Cost Estimate to Plug and Abandon – Reimer Calhoun SWD No. 001**

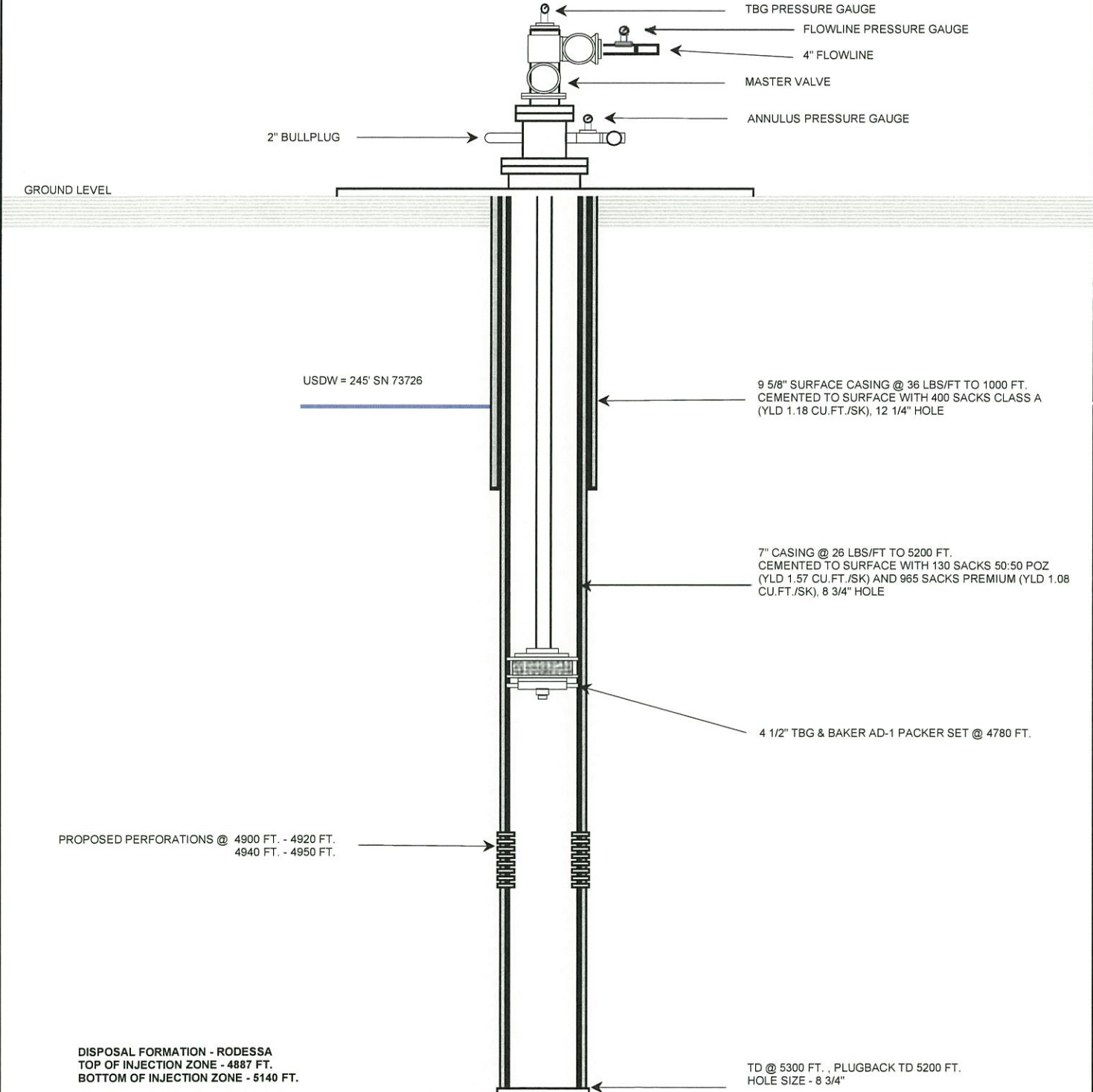
1. Mobilization of Equipment .....	\$3,500.00
2. Work Over Rig Equipment and Expenses (7 days at \$4,000/day).....	\$28,000.00
3. Supervisor (7 days at \$1,200.00 per day).....	\$8,400.00
4. Wireline services.....	\$9,500.00
5. Cementing Equipment and Services .....	\$27,500.00
6. Weighted mud between plugs.....	\$4,500.00
7. Vacuum truck services (2 days at \$850.00 per day) .....	\$1,700.00
8. Backhoe .....	\$650.00
9. Welder.....	\$600.00
<b>Estimated Total to Plug and Abandon .....</b>	<b>\$84,350.00</b>

**PA PROSPECT CORPORATION  
REIMER CALHOUN SWD NO. 002, NEW WELL  
RED RIVER PARISH, LOUISIANA**

**Plugging and Abandoning Procedure – Reimer Calhoun SWD NO. 002**

1. Contact Conservation Enforcement Specialist (CES) agent to witness plugging and abandoning procedure.
2. Pressure test casing/tubing annulus. Bleed off pressure in both annulus and tubing. Use weighted fluid to kill well if necessary.
3. Pull wellhead and surface equipment to remove injection string – (4 1/2" tubing). Release tension packer and pull 4 1/2 in. tubing.
4. Run and set retainer at 4895 ft. Run 2 7/8 in. tubing and string into retainer. Break down formation.
5. Squeeze perforations with 150 sacks of Class A (Yld 1.18 cu.ft./sk) cement or until locks up. Spot 200 ft. of cement on top of retainer (PBSD 4695') with 38 sacks of Class A (Yld 1.18 cu.ft./sk). Wait 12 hours on cement.
6. Go in hole and tag cement. Pressure test to a minimum of 300 psi without more than 5% loss in pressure in a 30 min. period.
7. Pump 10#/gal mud on top of cement plug within wellbore.
8. Spot 200' cement plug from 1100 ft. – 900 ft. with 38 sacks of Class A cement (100' inside and outside surface casing). Wait 12 hours on cement.
9. Go in hole and tag cement. Pressure test plug to a minimum of 300 psi without more than 5% loss in pressure within a 30 min. period.
10. Pump 10#/gal mud on top of cement plug in wellbore.
11. Spot 100' cement plug from 195 ft. – 295 ft. with 20 sacks of Class A cement (50' inside and outside USDW @ 245 ft.). Wait 12 hours on cement.
12. Go in hole and tag cement. Pressure test plug to a minimum of 300 psi without more than 5% loss in pressure within a 30 min. period.
13. Pump 10#/gal mud on top of cement plug in wellbore.
14. Spot 100 ft. cement plug from 105' – 5' with 20 sacks of Class A cement.
15. Cut all casing 5 ft. below ground surface. Weld ½ in. steel plate on each casing string. Weld SN and P&A date on top of plate.
16. Cover steel plate and remediate area, restoring location.

PA PROSPECT CORPORATION (P5603)  
 REIMER CALHOUN SWD NO. 002  
 SECTION 27, TOWNSHIP 13 NORTH, RANGE 11 WEST  
 RED RIVER-BULL BAYOU FIELD (7651)  
 RED RIVER PARISH, LOUISIANA



	PROJECT	SCALE	PA PROSPECT CORPORATION (P5603) REIMER CALHOUN SWD NO. 002 (PROPOSED) SECTION 27, TOWNSHIP 13 NORTH, RANGE 11 WEST RED RIVER-BULL BAYOU FIELD (7651) RED RIVER PARISH, LOUISIANA	ATT. 4A REIMER CALHOUN SWD NO. 002 PROPOSED WELL SCHEMATIC DIAGRAM Revised 6-17-2020
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	SHEET	DATE		
A	2/12/2019			



PA PROSPECT CORPORATION (P5603)  
 REIMER CALHOUN SWD NO. 002  
 SECTION 27, TOWNSHIP 13 NORTH, RANGE 11 WEST  
 RED RIVER-BULL BAYOU FIELD (7651)  
 RED RIVER PARISH, LOUISIANA

GROUND LEVEL

Cut all casing 5' below ground level. Weld 1/2" steel plate on each casing string. Weld SN and P&A date on top of plate. Cover Wellhead and remediate area around wellhead. Restore Location.

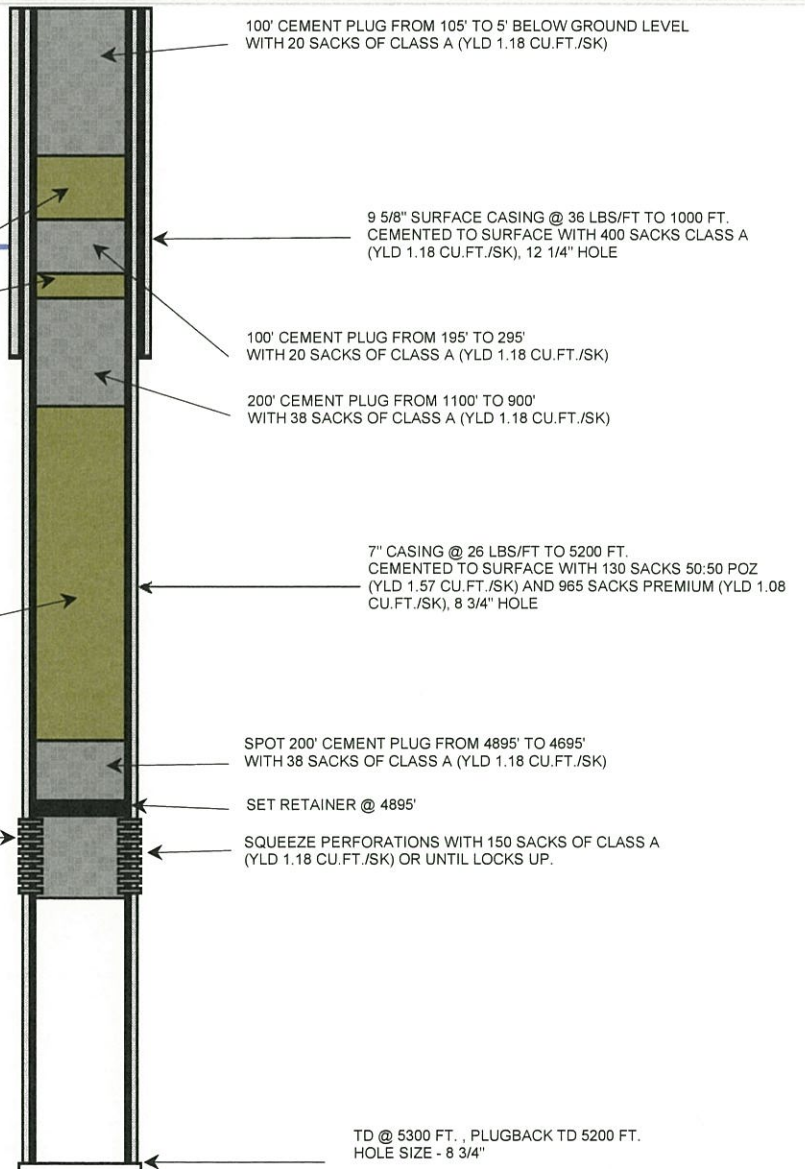
USDW = 245' SN 73726

FILL WELLBORE WITH 10#/GAL MUD ON TOP OF CEMENT PLUG.


FILL WELLBORE WITH 10#/GAL MUD ON TOP OF CEMENT PLUG.

PERFORATIONS @ 4900 FT. - 4920 FT.  
 4940 FT. - 4950 FT.

DISPOSAL FORMATION - RODESSA  
 TOP OF INJECTION ZONE - 4887 FT.  
 BOTTOM OF INJECTION ZONE - 5140 FT.



TD @ 5300 FT. , PLUGBACK TD 5200 FT.  
 HOLE SIZE - 8 3/4"

	PROJECT	SCALE	PA PROSPECT CORPORATION (P5603) REIMER CALHOUN SWD NO. 002 (PROPOSED) SECTION 27, TOWNSHIP 13 NORTH, RANGE 11 WEST RED RIVER-BULL BAYOU FIELD (7651) RED RIVER PARISH, LOUISIANA	APPENDIX N REIMER CALHOUN SWD NO. 002 PROPOSED P&A SCHEMATIC DIAGRAM ATTACHMENT 9 Revised 6-17-2020
	SA03428	NTS		
	PAGE	DRAWN BY		
	1	CR		
SHEET	DATE			
A	2/12/2019			

**PA PROSPECT CORPORATION  
REIMER CALHOUN SWD NO. 002, NEW WELL  
RED RIVER PARISH, LOUISIANA**

**Closure Cost Estimate to Plug and Abandon – Reimer Calhoun SWD No. 002**

1. Mobilization of Equipment .....	\$3,500.00
2. Work Over Rig Equipment and Expenses (7 days at \$4,000/day).....	\$28,000.00
3. Supervisor (7 days at \$1,200.00 per day).....	\$8,400.00
4. Wireline services.....	\$9,500.00
5. Cementing Equipment and Services .....	\$27,500.00
6. Weighted mud between plugs.....	\$4,500.00
7. Vacuum truck services (2 days at \$850.00 per day) .....	\$1,700.00
8. Backhoe .....	\$650.00
9. Welder.....	\$600.00
<b>Estimated Total to Plug and Abandon .....</b>	<b>\$84,350.00</b>

**PA PROSPECT CORPORATION  
REIMER CALHOUN SWD NO. 001 AND REIMER CALHOUN SWD NO. 002  
RED RIVER PARISH, LOUISIANA**

**Closure Cost Estimate to Abandon Reimer Calhoun - Tank Battery & Facility**

1. Two (2) vacuum trucks to clean tanks (4 days at \$1,700.00 per day).....	\$6,800.00
2. Labor to clean tanks (7 days at \$1,200.00 per day) .....	\$8,400.00
3. Disposal of 5,000 barrels of saltwater at \$1.25 per barrel .....	\$6,250.00
4. Disposal of approximately 600 barrels of solids, tank bottoms at \$12.50 per barrel .....	\$7,500.00
5. Transportation for disposal of solids.....	\$1,500.00
6. Dismantling and disposal of tanks and equipment.....	\$4,200.00
7. Demolition of concrete, retaining walls, and other materials related to site cleanup .....	\$120,000.00
8. Demolition and disposal or recycling of facility piping .....	\$4,980.00
9. Removal of lab and trailer.....	\$5,000.00
10. Backfill and level site and plant grass.....	\$4,100.00
11. Miscellaneous expenses .....	\$5,000.00
<b>Estimated Total of Closure of Tank Battery &amp; Facility .....</b>	<b>\$173,730.00</b>

**PA PROSPECT CORPORATION  
 REIMER CALHOUN SWD NO. 001 AND REIMER CALHOUN SWD NO. 002  
 COMMERCIAL FACILITY CLOSURE COSTS  
 SECTION 27 – T13N – R11W  
 RED RIVER PARISH, LOUISIANA**

**Summary Cost of Plugging and Abandoning Reimer Calhoun SWD No. 001 & No. 002, and Closure  
 of Tank Battery & Facility**

1. Estimated Total to Plug and Abandon Reimer Calhoun SWD No. 001 .....	\$84,350.00
2. Estimated Total to Plug and Abandon Reimer Calhoun SWD No. 002.....	\$84,350.00
3. Estimated Total of Closure of Tank Battery & Facility .....	\$173,730.00
4. Supervision (15% of TB Facility Total).....	\$26,059.50
5. Contingency (10%).....	\$36,848.95
<b>Total Estimated Cost to Plug and Abandon Well, Close Site and Remove          Surface Equipment .....</b>	<b>\$405,338.45</b>

If the site is approved, once in operation this cost will be updated every year in accordance with LAC 43:XIX.513.C

**AFFIDAVIT OF INDEPENDENT PROFESSIONAL CONSULTANT**

STATE OF LOUISIANA

PARISH OF CADDO

Charlie Reynolds, being duly sworn, deposes and says:

I am the Oil and Gas Division Manager of ALTEC Environmental Consulting, LLC, a Louisiana Limited Liability Company; and

This affidavit is being executed for the purpose of notifying the Louisiana Department of Natural Resources certifying that the closure plan and cost estimate included within this application were provided by ALTEC Environmental Consulting, LLC, an independent professional consultant.



\_\_\_\_\_  
Charlie Reynolds, Agent

Sworn to before me this 13<sup>th</sup> day of February, 2019.



\_\_\_\_\_  
Notary Public

Notary # 66595

Notary Public in and for DeSoto Parish, Louisiana.

My commission expires At Death.

Address of agent signing this Affidavit:

Charlie Reynolds  
ALTEC Environmental Consulting, LLC  
10100 Woolworth Road  
Keithville, LA 71047

**AFFIDAVIT OF INDEPENDENT PROFESSIONAL CONSULTANT**

STATE OF LOUISIANA

PARISH OF CADDO

Charlie Reynolds, being duly sworn, deposes and says:

I am the Oil and Gas Division Manager of ALTEC Environmental Consulting, LLC, a Louisiana Limited Liability Company; and

This affidavit is being executed for the purpose of notifying the Louisiana Department of Natural Resources certifying that the closure plan and cost estimate included within this application were provided by ALTEC Environmental Consulting, LLC, an independent professional consultant.

Charlie Reynolds, Agent

Sworn to before me this 11 day of November, 2020.

Notary Public

Notary # 66595



Notary Public in and for DeSoto Parish, Louisiana.

My commission expires At Death.

Address of agent signing this Affidavit:

Charlie Reynolds  
ALTEC Environmental Consulting, LLC  
10100 Woolworth Road  
Keithville, LA 71047

ORIGINAL

Upon completion of the application process, the commissioner will set the amount of the required bond or irrevocable letter of credit in accordance with LAC 43:XIX.519.C.14b. The applicant will obtain the required bond or irrevocable letter of credit in that amount set by the commissioner. A draft irrevocable letter of credit and Surety Bond are attached.

**DRAFT IRREVOCABLE LETTER OF CREDIT**

Dears Sirs:

We hereby establish our Irrevocable Letter of Credit No. \_\_\_\_\_ in your favor, at the request and for the account of PA PROSPECT CORPORATION up to the aggregate amount of **(amount)** available upon presentation by the Commissioner of Conservation, Office of Conservation, Department of Natural Resources, State of Louisiana, on:

- 1) your sight draft, bearing reference to this letter of credit No. \_\_\_\_\_; and
- 2) your signed statement reading as follows: "I certify that the amount of the draft is payable pursuant to regulations issued in accordance with the requirements of Louisiana R.S.30:1 et seq."

This letter of credit is effective as of \_\_\_\_\_, 20\_\_\_\_, and shall expire on October 1, 20\_\_\_\_, but such expiration date shall be automatically extended for a period of at least one year on October 1, 20\_\_\_\_, and on each successive expiration date, unless at least 120 days before the current expiration date, we notify both you and PA PROSPECT CORPORATION by certified mail that we have decided not to extend this letter of credit beyond the current expiration date. In the event you are so notified, any unused portion of the credit shall be available upon presentation of your sight draft for 120 days after the date of receipt by both you and PA PROSPECT CORPORATION as shown on the signed return receipts.

This letter is subject to the Uniform Customs and Practice for Documentary Credits (2007 Revision), International Chamber of Commerce Publication No. 600 ("UCP 600").

We hereby agree with you and negotiating banks or bankers that drafts drawn under and in compliance with the terms of this credit shall be duly honored on due presentation to the drawee.

{Signatures(s) and title(s) of official(s) of issuing institution and date}

(Two Bank signatures required)

**(Note: Beneficiary is Office of Conservation, Department of Natural Resources, State of Louisiana.)**



STATE OF LOUISIANA  
PARISH OF EAST BATON ROUGE

**DRAFT SURETY BOND**

FROM: PA PROSPECT CORPORATION  
AND  
SURETY

TO: OFFICE OF CONSERVATION  
DEPARTMENT OF NATURAL RESOURCES  
STATE OF LOUISIANA

THIS SURETY BOND is given by PA Prospect Corporation, principal, and [surety name], Surety, to Office of Conservation, Department of Natural Resources, State of Louisiana, 70804-9275, pursuant to the following terms and conditions:

Principal and surety are bound to creditor in the sum of \$[TBD] Dollars, for the payment of which principal and surety jointly and severally bind themselves, their successors, and assigns.

Principal has applied to Creditor to receive a permit or has in effect a permit issued by Creditor to operate a commercial facility, Site Code TBD, for the receipt, storage, treatment and/or disposal of exploration and production waste in RED RIVER Parish, Louisiana pursuant to the provisions of LSA-R.S. 30:4(I)(10), and LAC43:XIX.Subpart 1.Chapter 5, Sections 513 and 567. Principal is required to provide bonding to insure the adequate closure of such facility and this bond is issued for said purpose.

This obligation shall run continuously and shall remain in full force and effect until and unless the bond is canceled as provided herein or as otherwise provided by law.

Surety may cancel the bond only by sending notice of cancellation by certified mail to both Principal and Creditor. Cancellation cannot occur or be effective until 120 days after the date of receipt of notice of cancellation by both Principal and Creditor. Further, such notice of cancellation or cancellation shall not affect this surety bond in respect to any obligation which may have arisen prior thereto.

Surety shall become liable on this bond obligation if and when Principal fails to perform his obligation to adequately close the facility as determined by Creditor after notice and in accordance with administrative procedures.

Following such determinations, Creditors shall draw on the surety bond by requesting payment by certified mail, and Surety shall pay the amount thereof within 30 days of receipt of said demand. If payment is not made within said 30 days period Surety shall also be liable for legal interest from date of receipt of demand, 10% of principal and interest as attorney's fees and all court cost incurred to collect the obligation.

The amount of the bond liability is as expressed herein, but Principal and Surety take notice of the legal requirements for annual review of the closure bond amounts, which is based upon cost estimates for adequate closure. Following this review Creditor may increase, decrease or allow the amount to remain the same. Upon notice from Creditor, if an increase is required, Principal shall cause the bond amount to be increased or shall otherwise provide the added security within 60 days after notice.

I WITNESS WHEREOF, the principal and Surety have executed this surety bond at \_\_\_\_\_ on this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
WITNESS

\_\_\_\_\_  
PRINCIPLE

\_\_\_\_\_  
WITNESS

\_\_\_\_\_  
WITNESS

\_\_\_\_\_  
SURETY

\_\_\_\_\_  
WITNESS

Approved, accepted and executed by Creditor at Baton Rouge, Louisiana this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
WITNESS

OFFICE OF CONSERVATION

\_\_\_\_\_  
WITNESS

By: \_\_\_\_\_  
Commissioner of Conservation

**THIS DOCUMENT IS A DRAFT SURETY BOND**

**The Times**  
State of Louisiana  
Parish of Caddo  
**AFFIDAVIT OF PUBLICATION**

ALTEC ENVIRONMENTAL CONSULTING  
10100 WOOLWORTH RD  
KEITHVILLE, LA 71047

Account No.: SHR-CA2245  
Ad No.: 0003372409  
Ad Total: \$1,284.30  
PO #: SA03428

*Nana Figueroa*, personally known to me who being duly sworn, deposes and says that she is the LEGAL CLERK, for The Times, and that the attached advertisement published entitled:

NOTICE OF INTENT IN ACCORDANCE WITH THE  
LAWS OF THE STATE OF LOUISIANA AND THE  
RULES AND REGULATIONS OF THE DEPARTMENT  
OF NATURAL RESOURCES, OFFICE OF CONSERVA  
**Notice published in the Times on 02/07/19, 02/08/19, 02/09/19**

(Signed) *Nana Figueroa*

*Kathleen Gibson* 2/11/2019

(Notary)



NOTICE OF INTENT

IN ACCORDANCE WITH THE LAWS OF THE STATE OF LOUISIANA AND THE RULES AND REGULATIONS OF THE DEPARTMENT OF NATURAL RESOURCES, OFFICE OF CONSERVATION,

PA PROSPECT CORPORATION (P5603)  
P.O. BOX 785  
COLUMBUS, MT 59019  
(406) 322-9951

IS HEREBY PUBLISHING A NOTICE OF INTENT TO FILE AN APPLICATION WITH THE COMMISSIONER OF THE OFFICE OF CONSERVATION, POST OFFICE BOX 94275, BATON ROUGE, LOUISIANA 70804-9275. SAID APPLICATION WILL REQUEST APPROVAL FROM THE ENVIRONMENTAL DIVISION TO CONSTRUCT AND OPERATE A COMMERCIAL DEEP WELL INJECTION WASTE DISPOSAL FACILITY FOR DISPOSAL OF EXPLORATION & PRODUCTION WASTE (E & P WASTE) FLUIDS.

THE PROPOSED FACILITY WILL BE LOCATED IN RED RIVER PARISH, SECTION 27, TOWNSHIP 13 NORTH, RANGE 11 WEST, APPROXIMATELY 11.0 MILES NORTHWEST OF COUSHATTA, LOUISIANA.

APPLICANT INTENDS TO DISPOSE OF EXPLORATION AND PRODUCTION WASTE FLUIDS GENERATED FROM THE DRILLING AND PRODUCTION OF OIL AND GAS WELLS BY MEANS OF DEEP WELL INJECTION INTO THE SUBSURFACE AFTER INITIAL STORAGE IN TANKS.

The Times  
February 7, 2019  
February 8, 2019  
February 9, 2019

# AFFIDAVIT OF PUBLICATION

STATE OF LOUISIANA

Parish of Natchitoches

Before me, a Notary Public, personally came and appeared Vickie Feazell

who, being duly sworn, did depose and say that she/he is Bookkeeper of

The *Coushatta Citizen*, a newspaper of general circulation published within the Parish of Red River ,

and that Notice of Intent – PA Prospect Corporation (P5603) is publishing a Notice of Intent to file an application with the Commissioner of the Office of Conservation for approval to construct and operate a commercial deep well injection waste disposal facility for disposal of exploration & production waste (E&P Waste) fluids. Located in Red River Parish, Section 27, township 13 North, Range 11 West, approx. 11.0 miles Northwest of Coushatta, Louisiana #19-19

as per copy attached hereto, was published in said newspaper in the issues of 2/14, 2/21 & 2/28/19

(S) Vickie Feazell

SWORN AND SUBSCRIBED to before me this 28<sup>th</sup> day of February, 2019.

Tammy E. Raynes  
Notary Public

Tammy E. Raynes  
#035617

# NOTICE OF INTENT

IN ACCORDANCE WITH THE LAWS OF THE STATE OF LOUISIANA AND THE RULES AND REGULATIONS OF THE DEPARTMENT OF NATURAL RESOURCES, OFFICE OF CONSERVATION,

PA PROSPECT CORPORATION (P5603)

P.O. BOX 785

COLUMBUS, MT 59019

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#019-19

2/14, 2/21, 2/28


**CAPITAL CITY PRESS**

Publisher of  
**THE ADVOCATE**

**PROOF OF PUBLICATION**

The hereto attached notice was published in THE ADVOCATE, a daily newspaper of general circulation published in Baton Rouge, Louisiana, and the Official Journal of the State of Louisiana, City of Baton Rouge, and Parish of East Baton Rouge or published daily in THE NEW ORLEANS ADVOCATE, in New Orleans Louisiana, or published daily in THE ACADIANA ADVOCATE in Lafayette, Louisiana, in the following issues:

02/11/2019, 02/12/2019, 02/13/2019



Kristi Bunch, Public Notices Representative

Sworn and subscribed before me by the person  
whose signature appears above

2/13/2019



M. Monic McChristian,  
Notary Public ID# 88293  
State of Louisiana  
My Commission Expires: Indefinite



ALTEC ENVIRONMENTAL	328659-01
STACI PRICE 10100 WOOLWORTH ROAD KEITHVILLE, LA 71047	

# **NOTICE OF INTENT**

**IN ACCORDANCE WITH THE LAWS OF THE STATE OF LOUISIANA AND THE RULES AND REGULATIONS OF THE DEPARTMENT OF NATURAL RESOURCES, OFFICE OF CONSERVATION,**

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