

## RAILROAD COMMISSION OF TEXAS

Oil and Gas Division

Tracking No.: 113960

Status: Submitted

This facsimile W-2 was generated electronically  
from data submitted to the RRC.

API No. 42- 105-42020

7. RRC District No.  
7C8. RRC Lease No.  
17662

## Oil Well Potential Test, Completion or Recompletion Report, and Log

1. FIELD NAME (as per RRC Records or Wildcat)  
HOLT RANCH (CONSOLIDATED)2. LEASE NAME  
UNIVERSITY 459. Well No.  
2235HC3. OPERATOR'S NAME (Exactly as shown on Form P-5, Organization Report)  
APPROACH OPERATING LLCRRC Operator No.  
02862510. County of well site  
CROCKETT

4. ADDRESS

ONE RIDGMAR CENTRE 6500 WEST FREEWAY SUITE 800 FORT WORTH, TX 76116-0000

5. If Operator has changed within last 60 days, name former operator

11. Purpose of filing

Initial Potential ☒Retest ☐Reclass ☐Well record only  
(Explain in remarks) ☐

6a. Location (Section, Block, and Survey)

22, 45, UL, A-U426

6b. Distance and direction to nearest town in this county.

OZONA

12. If workover or reclass, give former field (with reservoir) &amp; Gas ID or oil lease no.

GAS ID or  
OIL LEASE #Oil-O  
Gas-G

Well #

N/A

13. Type of electric or other log run  
None14. Completion or recompletion date  
07/18/2014

## SECTION I- POTENTIAL TEST DATA IMPORTANT: Test should be for 24 hours unless otherwise specified infield rules.

|  |                               |  |                      |                             |                                      |
|--|-------------------------------|--|----------------------|-----------------------------|--------------------------------------|
| 15. Date of test<br>08/01/2014   | 16. No. of hours tested<br>24 | 17. Production method (Flowing, Gas Lift, Jetting, Pumping- Size & Type of pump)<br>Gas Lift |                      |                             | 18. Choke size<br>1.0                |
| 19. Production during<br>Test Period   | Oil - BBLS<br>365.0           | Gas - MCF<br>926   | Water - BBLS<br>2262 | Gas - Oil Ratio<br>2536     | Flowing Tubing Pressure<br>225.0 PSI |
| 20. Calculated 24-<br>Hour Rate  | Oil - BBLS<br>365.0           | Gas - MCF<br>926   | Water - BBLS<br>2262 | Oil Gravity-API-60°<br>44.0 | Casing Pressure<br>830.0 PSI         |
| 21. Was swab used during this test?<br>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |                               | 22. Oil produced prior to test (New & Reworked wells)<br>3011.0                              |                      |                             | 23. Injection Gas-Oil Ratio          |
| REMARKS: N/A   |                               |  |                      |                             |                                      |
|  |                               |  |                      |                             |                                      |
|  |                               |  |                      |                             |                                      |
|  |                               |  |                      |                             |                                      |

INSTRUCTIONS: File an original and one copy of the completed Form W-2 in the appropriate RRC District Office within 30 days after completing a well and within 10 days after a potential test. If an operator does not properly report the results of a potential test within the 10-day period, the effective date of the allowable assigned to the well will not extend back more than 10 days before the W-2 was received in the District Office. (Statewide Rules 16 and 51) To report a completion or recompletion, fill in both sides of this form. To report a retest, fill in only the front side.

## WELL TESTERS CERTIFICATION

I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I conducted or supervised this test by observation of (a) meter readings or (b) the top and bottom gauges of each tank into which production was run during the test. I further certify that the potential test data shown above is true, correct, and complete, to the best of my knowledge.

Signature: Well Tester

Name of Company

RRC Representative

## OPERATOR'S CERTIFICATION

I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this report, that this report was prepared by me or under my supervision and direction, and that data and facts stated therein are true, correct and complete, to the best of my knowledge.

Type or printed name of operator's representative

(817) 989-9000 EXT 2143 08/28/2014

Telephone: Area Code Number Month Day Year

SR Regulatory Specialist

Title of Person  
Carol Adler

Signature

|  |           |  |            |  |   |   |                   |  |               |  |                     |  |  |  |  |
|--|-----------|--|------------|--|---|---|-------------------|--|---------------|--|---------------------|--|--|--|--|
| SECTION III  |           |  |            |  |   |   |                   | DATA ON WELL COMPLETION AND LOG (Not Required on Retest)                                     |               |  |                     |  |  |  |  |
| 24. Type of Completion<br><div>New Well <input checked="" type="checkbox"/> Deepening <input type="checkbox"/> Plug Back <input type="checkbox"/> Other <input type="checkbox"/></div> |           |  |            |  |   | 25. Permit to Drill, Plug Back or Deepen<br>DATE 04/16/2014 PERMIT NO. 781796<br>Rule 37 Exception CASE NO.<br>Water Injection Permit PERMIT NO.<br>Salt Water Disposal Permit PERMIT NO.<br>Other PERMIT NO. |                   |  |               |  |                     |  |  |  |  |
| 26. Notice of Intention to Drill this well was filed in Name of APPROACH OPERATING LLC   |           |  |            |  |   |   |                   |  |               |  |                     |  |  |  |  |
| 27. Number of producing wells on this lease in this field (reservoir) including this well<br>91  |           |  |            | 28. Total number of acres in this lease<br>14981.5 |   |   |                   |  |               |  |                     |  |  |  |  |
| 29. Date Plug Back, Deepening, Workover or Drilling Operations:  |           | Commenced<br>05/30/2014                          |            | Completed<br>06/15/2014                            |   | 30. Distance to nearest well, Same Lease & Reservoir<br>341.0   |                   |  |               |  |                     |  |  |  |  |
| 31. Location of well, relative to nearest lease boundaries<br>8900.0 Feet From South Line and 7641.0 Feet from East Line of the UNIVERSITY 45 Lease                                    |           |  |            |  |   |   |                   |  |               |  |                     |  |  |  |  |
| 32. Elevation (DF, RKB, RT, GR ETC.)<br>2618 GL  |           |  |            |  |   | 33. Was directional survey made other than inclination (Form W-12)?<br><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No  |                   |  |               |  |                     |  |  |  |  |
| 34. Top of Pay   |           | 35. Total Depth<br>6576 MD: 13388                |            | 36. P. B. Depth<br>6575 MD: 13298                  |   | 37. Surface Casing Determined by Field Rules <input type="checkbox"/>   |                   | Recommendation of T.D.W.R. Railroad Commission (Special) <input checked="" type="checkbox"/> |               | Dt. of Letter 03/24/2014   |                     |  |  |  |  |
| 38. Is well multiple completion?<br><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No  |           |  |            |  |   |   |                   |  |               |  |                     |  |  |  |  |
| 39. If multiple completion, list all reservoir names (completions in this well) and Oil Lease or Gas ID No.<br>FIELD & RESERVOIR<br>N/A  |           |  |            |  |   | GAS ID or OIL LEASE #   |                   | Oil-Gas-G  |               | Well #   |                     |  |  |  |  |
| 40. Intervals Drilled by:  |           | Rotary Tools <input checked="" type="checkbox"/> |            | Cable Tools  |   | 41. Name of Drilling Contractor   |                   |  |               | 42. Is Cementing Affidavit Attached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |                     |  |  |  |  |
| 43. CASING RECORD (Report All Strings Set in Well)   |           |  |            |  |   |   |                   |  |               |  |                     |  |  |  |  |
| CASING SIZE  | WT #/FT.  |  | DEPTH SET  |  | MULTISTAGE TOOL DEPTH   | TYPE & AMOUNT CEMENT (sacks)  |                   | HOLE SIZE  | TOP OF CEMENT |  | SLURRY VOL. cu. ft. |  |  |  |  |
| 9 5/8  |           |  | 1252       |  |   | CLASS C 620   |                   | 12 1/4   | 0             |  | 1112.0              |  |  |  |  |
| 5 1/2  |           |  | 13388      |  |   | CLASS H 2550  |                   | 8 3/4  | 1158          |  | 3670.0              |  |  |  |  |
|  |           |  |            |  |   |   |                   |  |               |  |                     |  |  |  |  |
|  |           |  |            |  |   |   |                   |  |               |  |                     |  |  |  |  |
| 44. LINER RECORD   |           |  |            |  |   |   |                   |  |               |  |                     |  |  |  |  |
| Size   |           | Top  |            | Bottom   |   | Sacks Cement  |                   | Screen   |               |  |                     |  |  |  |  |
| N/A  |           |  |            |  |   |   |                   |  |               |  |                     |  |  |  |  |
| 45. TUBING RECORD  |           |  |            |  |   |   |                   |  |               |  |                     |  |  |  |  |
| Size   | Depth Set |  | Packer Set |  | 46. Producing Interval (this completion) Indicate depth of perforation or open hole |   |                   |  |               |  |                     |  |  |  |  |
| 2 7/8  | 6514      |  | 6506       |  | From L1 6695 To 13279   |   |                   |  |               |  |                     |  |  |  |  |
|  |           |  |            |  | From To   |   |                   |  |               |  |                     |  |  |  |  |
|  |           |  |            |  | From To   |   |                   |  |               |  |                     |  |  |  |  |
|  |           |  |            |  | From To   |   |                   |  |               |  |                     |  |  |  |  |
| 47. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.   |           |  |            |  |   |   |                   |  |               |  |                     |  |  |  |  |
| Depth Interval   |           |  |            |  | Amount and Kind of Material Used  |   |                   |  |               |  |                     |  |  |  |  |
| 6695.0   |           | 13279.0  |            |  | 176537BBLS FLUID; 104700GALS 15% HCL; 3804183#100MESH; 4104053#40/70                |   |                   |  |               |  |                     |  |  |  |  |
|  |           |  |            |  |   |   |                   |  |               |  |                     |  |  |  |  |
|  |           |  |            |  |   |   |                   |  |               |  |                     |  |  |  |  |
|  |           |  |            |  |   |   |                   |  |               |  |                     |  |  |  |  |
| 48. FORMATION RECORD (LIST DEPTHS OF PRINCIPAL GEOLOGICAL MARKERS AND FORMATION TOPS)  |           |  |            |  |   |   |                   |  |               |  |                     |  |  |  |  |
| Formations   |           | Depth  |            |  | Formations  |   | Depth             |  |               |  |                     |  |  |  |  |
| CANYON   |           | 0.0 MD: 0.0                                      |            |  | QUEEN   |   | 1174.0 MD: 1174.0 |  |               |  |                     |  |  |  |  |
| STRAWN   |           | 0.0 MD: 0.0                                      |            |  | SAN ANDRES  |   | 1641.0 MD: 1641.0 |  |               |  |                     |  |  |  |  |
| DEVONIAN   |           | 0.0 MD: 0.0                                      |            |  | LEONARD   |   | 4166.0 MD: 4170.0 |  |               |  |                     |  |  |  |  |
| ELLENBURGER  |           | 0.0 MD: 0.0                                      |            |  | WOLFCAMP  |   | 5598.0 MD: 5603.0 |  |               |  |                     |  |  |  |  |
| REMARKS: N/A   |           |  |            |  |   |   |                   |  |               |  |                     |  |  |  |  |

Cementer: Fill in shaded areas.  
Operator: Fill in other items.

**RAILROAD COMMISSION OF TEXAS**  
Oil and Gas Division

**Form W-15**  
Cementing Report  
Rev. 4/1/83  
483-045

|  |                                      |                                   |  |
|--|--------------------------------------|-----------------------------------|--|
| 1. Operator's Name (As shown on Form P-5, Organization Report)<br><b>Approach OPERATING, LLC</b> | 2. RRC Operator No.<br><b>028625</b> | 3. RRC District No.<br><b>7C</b>  | 4. County of Well Site<br><b>CACOKET</b> |
| 5. Field Name (Wildcat or exactly as shown on RRC records)<br><b>HOLT RANCH (CONSOLIDATED)</b>   |                                      | 6. API No.<br><b>42-105-42020</b> | 7. Drilling Permit No.<br><b>78179LP</b> |
| 8. Lease Name<br><b>University 45</b>  | 9. Rule 37 Case No.                  | 10. Oil Lease/Gas ID No.          | 11. Well No.<br><b>2235 HC</b>           |

| CASING CEMENTING DATA:  |                                       |                  | SURFACE CASING  | INTER-MEDIATE CASING | PRODUCTION CASING |                           | MULTI-STAGE CEMENTING PROCESS |      |
|---|---------------------------------------|------------------|-----------------|----------------------|-------------------|---------------------------|-------------------------------|------|
|   |                                       |                  |                 |                      | Single String     | Multiple Parallel Strings | Tool                          | Shoe |
| 12. Cementing Date  |                                       |                  | <b>5/7/2014</b> |                      |                   |                           |                               |      |
| 13. • Drilled hole size   |                                       |                  | <b>12 1/4</b>   |                      |                   |                           |                               |      |
| • Est. % wash or hole enlargement   |                                       |                  |                 |                      |                   |                           |                               |      |
| 14. Size of casing  |                                       |                  | <b>9 5/8</b>    |                      |                   |                           |                               |      |
| 15. Top of liner (ft.)  |                                       |                  |                 |                      |                   |                           |                               |      |
| 16. Setting depth (ft.)   |                                       |                  | <b>1252</b>     |                      |                   |                           |                               |      |
| 17. Number of centralizers used   |                                       |                  | <b>10</b>       |                      |                   |                           |                               |      |
| 18. Hrs. waiting on cement before drill-out                                       |                                       |                  | <b>24</b>       |                      |                   |                           |                               |      |
| 1st Slurry  | 19. API cement used: No. of sacks ▶   |                  | <b>300</b>      |                      |                   |                           |                               |      |
|   | Class ▶                               | <b>C 65/35</b>   |                 |                      |                   |                           |                               |      |
|   | Additives ▶                           | <b>Remarks 1</b> |                 |                      |                   |                           |                               |      |
| 2nd Slurry  | No. of sacks ▶                        |                  | <b>175</b>      |                      |                   |                           |                               |      |
|   | Class ▶                               | <b>C</b>         |                 |                      |                   |                           |                               |      |
|   | Additives ▶                           | <b>Remarks 2</b> |                 |                      |                   |                           |                               |      |
| 3rd Slurry  | No. of sacks ▶                        |                  | <b>145</b>      |                      |                   |                           |                               |      |
|   | Class ▶                               | <b>C</b>         |                 |                      |                   |                           |                               |      |
|   | Additives ▶                           | <b>Remarks 3</b> |                 |                      |                   |                           |                               |      |
| 1st   | 20. Slurry pumped: Volume (cu. ft.) ▶ |                  | <b>681</b>      |                      |                   |                           |                               |      |
|   | Height (ft.) ▶                        |                  | <b>2174</b>     |                      |                   |                           |                               |      |
| 2nd   | Volume (cu. ft.) ▶                    |                  | <b>235</b>      |                      |                   |                           |                               |      |
|   | Height (ft.) ▶                        |                  | <b>748</b>      |                      |                   |                           |                               |      |
| 3rd   | Volume (cu. ft.) ▶                    |                  | <b>196</b>      |                      |                   |                           |                               |      |
|   | Height (ft.) ▶                        |                  | <b>624</b>      |                      |                   |                           |                               |      |
| Total   | Volume (cu. ft.) ▶                    |                  | <b>1112</b> ✓   |                      |                   |                           |                               |      |
|   | Height (ft.) ▶                        |                  | <b>3547</b> ✓   |                      |                   |                           |                               |      |
| 21. Was cement circulated to ground surface (or bottom of cellar) outside casing? |                                       |                  | <b>NO</b>       |                      |                   |                           |                               |      |
| 22. Remarks   |                                       |                  |                 |                      |                   |                           |                               |      |
| 1. 6% Gel, 2% Calcium Chloride, 0.4% CPT-503P, 1/4 PPS CelloFlake, 0.2% CPT-20    |                                       |                  |                 |                      |                   |                           |                               |      |
| 2. 1% Calcium Chloride  |                                       |                  |                 |                      |                   |                           |                               |      |
| 3. 2% Calcium Chloride  |                                       |                  |                 |                      |                   |                           |                               |      |

**OVER** ►

| CEMENTING TO PLUG AND ABANDON                     | PLUG # 1 | PLUG # 2 | PLUG # 3 | PLUG # 4 | PLUG # 5 | PLUG # 6 | PLUG # 7 | PLUG # 8 |
|---|----------|----------|----------|----------|----------|----------|----------|----------|
| 23. Cementing date                                |          |          |          |          |          |          |          |          |
| 24. Size of hole or pipe plugged (in.)            |          |          |          |          |          |          |          |          |
| 25. Depth to bottom of tubing or drill pipe (ft.) |          |          |          |          |          |          |          |          |
| 26. Sacks of cement used (each plug)              |          |          |          |          |          |          |          |          |
| 27. Slurry volume pumped (cu. ft.)                |          |          |          |          |          |          |          |          |
| 28. Calculated top of plug (ft.)                  |          |          |          |          |          |          |          |          |
| 29. Measured top of plug, if tagged (ft.)         |          |          |          |          |          |          |          |          |
| 30. Slurry wt. (lbs/gal)                          |          |          |          |          |          |          |          |          |
| 31. Type cement                                   |          |          |          |          |          |          |          |          |

CEMENTER'S CERTIFICATE: I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this certification, that the cementing of casing and/or the placing of cement plugs in the well as shown in this report was performed by me or under my supervision, and that the cementing data and facts presented on both sides of this form are true, correct, and complete, to the best of my knowledge. This certification covers cementing data only.

**Steve Edmonson** **Cementer**  
Name and title of cementer's representative

**Crest Pumping Technologies**  
Cementing Company

*Steve Edmonson*  
Signature

**309 West 7<sup>th</sup> Street Suite 1500**  
Address

**Fort Worth**  
City

**TX**  
State

**76102**  
Zip Code

**940-567-3392**  
Tel.: Area Code Number

**05/07/2014**  
Date: mo. day yr.

OPERATOR'S CERTIFICATE: I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this certification, that I have knowledge of the well data and information presented in this report, and that the data and facts presented on both sides of this form are true, correct, and complete, to the best of my knowledge. This certification covers all well data.

**Carol Adler**  
Typed or printed name of operator's representative  
**Sr. Regulatory Specialist**  
**6500 W. Freeway, Ste. 800**  
**Fort Worth, Texas 76116**  
**817-546-8483**  
Address State Zip Code

*Carol Adler*  
Signature  
**8/25/2014**  
Date: mo. day yr.

### Instructions to Form W-15, Cementing Report

**IMPORTANT:** Operators and cementing companies must comply with the requirements of the Commission's Statewide Rules 8 (Water Protection), 13 (Casing, Cementing, Drilling, and Completion), and 14 (Well Plugging). For offshore operations, see the requirements of Rule 13 (c).

**A. What to file.** An operator should file an original and one copy of the completed Form W-15 for each cementing company used on a well. The cementing of different casing strings on a well by one cementing company may be reported on one form. Form W-15 should be filed with the following:

- An initial oil or gas completion report, **Form W-2 or G-1**, as required by Statewide or special field rules;
- **Form W-4**, Application for Multiple Completion, if the well is a multiple parallel casing completion; and
- **Form W-3**, Plugging Record, unless the W-3 is signed by the cementing company representative. When reporting dry holes, operators must complete Form W-15, in addition to Form W-3, to show any casing cemented in the hole.

**B. Where to file.** The appropriate Commission District Office for the country in which the well is located.

**C. Surface casing.** An operator must set and cement sufficient surface casing to protect all usable-quality water strata, as defined by the Texas Department of Water Resources, Austin. Before drilling a well in any field or area in which no field rules are in effect or in which surface casing requirements are not specified in the applicable rules, an operator must obtain a letter from the Department of Water Resources stating the protection depth. Surface casing should not be set deeper than 200 feet below the specified depth without prior approval from the Commission.

**D. Centralizers.** Surface casing must be centralized at the shoe, above and below a stage collar or diverting tool, if run, and through usable-quality water zones. In nondeviated holes, a centralizer must be placed every fourth joint from the cement shoe to the ground surface or to the bottom of the cellar. All centralizers must meet API specifications.

**E. Exceptions and alternative casing programs.** The District Director may grant an exception to the requirements of Statewide Rule 13. In a written application, an operator must state the reason for the requested exception and outline an alternate program for casing and cementing through the protection depth for strata containing usable-quality water. The District Director may approve, modify, or reject a proposed program. **An operator must obtain approval of any exception before beginning casing and cementing operations.**

**F. Intermediate and production casing.** For specific technical requirements, operators should consult Statewide Rule 13 (b) (3) and (4).

**G. Plugging and abandoning.** Cement plugs must be placed in the wellbore as required by Statewide Rule 14. The District Director may require additional cement plugs. For onshore or inland wells, a 10-foot cement plug must be placed in the top of the well, and the casing must be cut off three feet below the ground surface. All cement plugs, except the top plug, must have sufficient slurry volume to fill 100 feet of hole, plus ten percent for each 1,000 feet of depth from the ground surface to the bottom of the plug.

To plug and abandon a well, operators must use only cementers approved by the Director of Field Operations. Cementing companies, service companies, or operators can qualify as approved cementers by demonstrating that they are able to mix and pump cement in compliance with Commission rules and regulations.

Cementer: Fill in shaded areas.  
Operator: Fill in other items.

**RAILROAD COMMISSION OF TEXAS**  
Oil and Gas Division

**Form W-15**  
Cementing Report  
Rev. 4/1/83  
483-045

|  |                                      |                                   |   |
|--|--------------------------------------|-----------------------------------|---|
| 1. Operator's Name (As shown on Form P-5, Organization Report)<br><b>Approach OPERATING, LLC</b> | 2. RRC Operator No.<br><b>028625</b> | 3. RRC District No.<br><b>7C</b>  | 4. County of Well Site                  |
| 5. Field Name (Wildcat or exactly as shown on RRC records)<br><b>HOLT RANCH (CONSOLIDATED)</b>   |                                      | 6. API No.<br><b>42-105-42020</b> | 7. Drilling Permit No.<br><b>781796</b> |
| 8. Lease Name<br><b>University 45</b>  | 9. Rule 37 Case No.                  | 10. Oil Lease/Gas ID No.          | 11. Well No.<br><b>2235 HC</b>          |

| CASING CEMENTING DATA:  |                                       | SURFACE CASING | INTER-MEDIATE CASING | PRODUCTION CASING  |                           | MULTI-STAGE CEMENTING PROCESS |      |
|---|---------------------------------------|----------------|----------------------|--------------------|---------------------------|-------------------------------|------|
|   |                                       |                |                      | Single String      | Multiple Parallel Strings | Tool                          | Shoe |
| 12. Cementing Date  |                                       |                |                      | <b>6/14/2014</b>   |                           |                               |      |
| 13. • Drilled hole size   |                                       |                |                      | <b>8 3/4</b>       |                           |                               |      |
| • Est. % wash or hole enlargement   |                                       |                |                      |                    |                           |                               |      |
| 14. Size of casing  |                                       |                |                      | <b>5 1/2</b>       |                           |                               |      |
| 15. Top of liner (ft.)  |                                       |                |                      |                    |                           |                               |      |
| 16. Setting depth (ft.)   |                                       |                |                      | <b>13388</b>       |                           |                               |      |
| 17. Number of centralizers used   |                                       |                |                      | <b>218</b>         |                           |                               |      |
| 18. Hrs. waiting on cement before drill-out                                       |                                       |                |                      | <b>✓</b>           |                           |                               |      |
| 1st Slurry  | 19. API cement used: No. of sacks ▶   |                |                      | <b>830</b>         |                           |                               |      |
|   | Class <b>2550</b> ▶                   |                |                      | <b>H 50/50 POZ</b> |                           |                               |      |
|   | Additives ▶                           |                |                      | <b>Remarks 1</b>   |                           |                               |      |
| 2nd Slurry  | No. of sacks ▶                        |                |                      | <b>1720</b>        |                           |                               |      |
|   | Class ▶                               |                |                      | <b>H 50/50 POZ</b> |                           |                               |      |
|   | Additives ▶                           |                |                      | <b>Remarks 2</b>   |                           |                               |      |
| 3rd Slurry  | No. of sacks ▶                        |                |                      |                    |                           |                               |      |
|   | Class ▶                               |                |                      |                    |                           |                               |      |
|   | Additives ▶                           |                |                      |                    |                           |                               |      |
| 1st   | 20. Slurry pumped: Volume (cu. ft.) ▶ |                |                      | <b>1486</b>        |                           |                               |      |
|   | Height (ft.) ▶                        |                |                      | <b>5882</b>        |                           |                               |      |
| 2nd   | Volume (cu. ft.) ▶                    |                |                      | <b>2184</b>        |                           |                               |      |
|   | Height (ft.) ▶                        |                |                      | <b>8648</b>        |                           |                               |      |
| 3rd   | Volume (cu. ft.) ▶                    |                |                      |                    |                           |                               |      |
|   | Height (ft.) ▶                        |                |                      |                    |                           |                               |      |
| Total   | Volume (cu. ft.) ▶                    |                |                      | <b>3670 ✓</b>      |                           |                               |      |
|   | Height (ft.) ▶                        |                |                      | <b>14,530 ✓</b>    |                           |                               |      |
| 21. Was cement circulated to ground surface (or bottom of cellar) outside casing? |                                       |                |                      | <b>Yes</b>         |                           |                               |      |

22. Remarks

- 2% Gel 5% Salt 0.80% CPT-19 0.40% CPT-503P 0.15% CPT-20
- 5% Salt 0.60% CPT-19 0.30% CPT-35 0.10% CPT-20



| CEMENTING TO PLUG AND ABANDON                     | PLUG # 1 | PLUG # 2 | PLUG # 3 | PLUG # 4 | PLUG # 5 | PLUG # 6 | PLUG # 7 | PLUG # 8 |
|---|----------|----------|----------|----------|----------|----------|----------|----------|
| 23. Cementing date                                |          |          |          |          |          |          |          |          |
| 24. Size of hole or pipe plugged (in.)            |          |          |          |          |          |          |          |          |
| 25. Depth to bottom of tubing or drill pipe (ft.) |          |          |          |          |          |          |          |          |
| 26. Sacks of cement used (each plug)              |          |          |          |          |          |          |          |          |
| 27. Slurry volume pumped (cu. ft.)                |          |          |          |          |          |          |          |          |
| 28. Calculated top of plug (ft.)                  |          |          |          |          |          |          |          |          |
| 29. Measured top of plug, if tagged (ft.)         |          |          |          |          |          |          |          |          |
| 30. Slurry wt. (lbs/gal)                          |          |          |          |          |          |          |          |          |
| 31. Type cement                                   |          |          |          |          |          |          |          |          |

CEMENTER'S CERTIFICATE: I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this certification, that the cementing of casing and/or the placing of cement plugs in the well as shown in this report was performed by me or under my supervision, and that the cementing data and facts presented on both sides of this form are true, correct, and complete, to the best of my knowledge. This certification covers cementing data only.

**Zach Leatherwood** **Cementer** **Crest Pumping Technologies**  
 Name and title of cementer's representative Cementing Company Signature  
**309 West 7<sup>th</sup> Street Suite 1500** **Fort Worth** **TX** **76102** **940-567-3392** **6/14/2014**  
 Address City State Zip Code Tel.: Area Code Number Date: mo. day yr.

OPERATOR'S CERTIFICATE: I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this certification, that I have knowledge of the well data and information presented in this report, and that the data and facts presented on both sides of this form are true, correct, and complete, to the best of my knowledge. This certification covers all well data.

**Carol Adler**  
 Typed or printed name of operator's representative **Sr. Regulatory Specialist** Signature  
**6500 W. Freeway, Ste. 800**  
**Fort Worth, Texas 76116**  
**817-646-8483**  
 Address City State Zip Code Tel.: Area Code Number Date: mo. day yr.

### Instructions to Form W-15, Cementing Report

**IMPORTANT:** Operators and cementing companies must comply with the requirements of the Commission's Statewide Rules 8 (Water Protection), 13 (Casing, Cementing, Drilling, and Completion), and 14 (Well Plugging). For offshore operations, see the requirements of Rule 13 (c).

**A. What to file.** An operator should file an original and one copy of the completed Form W-15 for each cementing company used on a well. The cementing of different casing strings on a well by one cementing company may be reported on one form. Form W-15 should be filed with the following:

- An initial oil or gas completion report, **Form W-2 or G-1**, as required by Statewide or special field rules;
- **Form W-4**, Application for Multiple Completion, if the well is a multiple parallel casing completion; and
- **Form W-3**, Plugging Record, unless the W-3 is signed by the cementing company representative. When reporting dry holes, operators must complete Form W-15, in addition to Form W-3, to show any casing cemented in the hole.

**B. Where to file.** The appropriate Commission District Office for the country in which the well is located.

**C. Surface casing.** An operator must set and cement sufficient surface casing to protect all usable-quality water strata, as defined by the Texas Department of Water Resources, Austin. Before drilling a well in any field or area in which no field rules are in effect or in which surface casing requirements are not specified in the applicable rules, an operator must obtain a letter from the Department of Water Resources stating the protection depth. Surface casing should not be set deeper than 200 feet below the specified depth without prior approval from the Commission.

**D. Centralizers.** Surface casing must be centralized at the shoe, above and below a stage collar or diverting tool, if run, and through usable-quality water zones. In nondeviated holes, a centralizer must be placed every fourth joint from the cement shoe to the ground surface or to the bottom of the cellar. All centralizers must meet API specifications.

**E. Exceptions and alternative casing programs.** The District Director may grant an exception to the requirements of Statewide Rule 13. In a written application, an operator must state the reason for the requested exception and outline an alternate program for casing and cementing through the protection depth for strata containing usable-quality water. The District Director may approve, modify, or reject a proposed program. **An operator must obtain approval of any exception before beginning casing and cementing operations.**

**F. Intermediate and production casing.** For specific technical requirements, operators should consult Statewide Rule 13 (b) (3) and (4).

**G. Plugging and abandoning.** Cement plugs must be placed in the wellbore as required by Statewide Rule 14. The District Director may require additional cement plugs. For onshore or inland wells, a 10-foot cement plug must be placed in the top of the well, and the casing must be cut off three feet below the ground surface. All cement plugs, except the top plug, must have sufficient slurry volume to fill 100 feet of hole, plus ten percent for each 1,000 feet of depth from the ground surface to the bottom of the plug.

To plug and abandon a well, operators must use only cementers approved by the Director of Field Operations. Cementing companies, service companies, or operators can qualify as approved cementers by demonstrating that they are able to mix and pump cement in compliance with Commission rules and regulations.

Groundwater  
Advisory Unit

GROUNDWATER PROTECTION DETERMINATION

Form GW-2

Date **March 24, 2014**

GAU File No.: **15547**

\*\*\*\*\* EXPEDITED APPLICATION \*\*\*\*\*

API Number **10500000**

Attention: **CAROL ADLER**

RRC Lease No. **000000**

**SC\_028625\_10500000\_000000\_15547.pdf**

**APPROACH OPERATING LLC  
ONE RIDGMAR CENTRE  
6500 W FWY STE 800  
FORT WORTH TX 76116**

--Measured--

**2260 ft FEL**

**1803 ft FNL**

**MRL:SECTION**

**P-5# 028625**

Digital Map Location:

X-coord/Long **101.23700**

Y-coord/Lat **30.93460**

Datum **27** Zone

County **CROCKETT**

Lease & Well No. **UNIVERSITY 45 #2231HB&PD**

Purpose **ND**

Location **SUR-UL,BLK-45,SEC-22,--[TD=7800],[RRC 7C],**

To protect usable-quality groundwater at this location, the Groundwater Advisory Unit of the Railroad Commission of Texas recommends:


**The interval from the land surface to 20 feet below the base of Cretaceous-age beds must be protected. The base of the Cretaceous is estimated to occur at a depth of 775 feet.**

**This recommendation is applicable to all wells drilled on this pad.**

Note: Unless stated otherwise, this recommendation is intended to apply only to the subject well and not for area-wide use. This recommendation is intended for normal drilling, production, and plugging operations only. It does not apply to saltwater disposal operation into a nonproductive zone (RRC Form W-14).

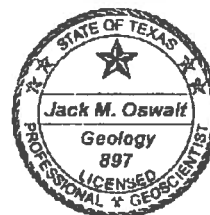
If you have any questions, please contact us at 512-463-2741, [gau@rrc.state.tx.us](mailto:gau@rrc.state.tx.us), or by mail.

Sincerely,

  
Digitally signed by Jack Oswalt  
DN: c=US, st=TEXAS, l=Austin, o=Railroad  
Commission of Texas, ou=Groundwater  
Advisory Unit, cn=Jack Oswalt,  
email=jackoswalt@rrc.state.tx.us  
Date: 2014.03.24 14:03:06 -05'00'

**Jack M. Oswalt, P.G.**

GEOLOGIST SEAL



Geologist, Groundwater Advisory Unit  
Oil & Gas Division

The seal appearing on this document was authorized by Jack M. Oswalt on 3/24/2014  
Note: Alteration of this electronic document will invalidate the digital signature.

Form GW-2  
Rev 02/2014

P.O. Box 12967 Austin, Texas 78711-2967 512-463-2741 Internet address: [www.rrc.state.tx.us](http://www.rrc.state.tx.us)



## RAILROAD COMMISSION OF TEXAS

### OIL AND GAS DIVISION

June 6, 2013

Approach Operating, LLC  
One Ridgemar Centre  
6500 West Freeway Suite 800  
Fort Worth, Texas 76116

Jim Melear

Re: Blanket Statewide Rule 13(b)2  
Surface Casing Exception  
Crockett County, Texas

Dear Operator:

Your company has been granted a one-year blanket exception to Statewide Rule 13(b)2 for all wells drilled in Crockett County, Texas. This exception authorizes you to set more than 200 feet of surface casing than required by the usable quality protection depth minimum requirement letter up to a maximum depth of 2100' feet from ground level. This exception is contingent upon compliance with all requirements found in Statewide Rule 13 and the following additional items:

1. This exception will be in effect until June 6, 2014.
2. An approved Railroad Commission drilling permit and usable quality fresh water protection depth letter are in hand prior to spudding well.
3. This exception is only granted for setting more surface casing than required. Alternate programs for setting less than specified amounts of surface casing will be reviewed on an individual well basis only.
4. An alternate casing program shall require the first string of casing set through the protection depth to be cemented in a manner that will effectively prevent the migration of any fluid to or from any stratum exposed to the wellbore outside this string of casing. The casing shall be cemented from the shoe to ground surface in a single stage, if feasible, or by a multi-stage process with the stage tool set at least 50 feet below the protection depth. **Due to the severe loss of circulation problems which occur in this area, the primary cement operation must consist of 100% excess of cement over calculated volumes, unless prior approval has been granted. If a basket is used, it shall be set no higher than 300' below ground level.**
5. Any alternate casing program shall include pumping sufficient cement to fill the annular space from the shoe or multi-stage tool to the ground surface. **If cement is not circulated to the ground surface or the bottom of the cellar, the operator shall run a temperature surface or cement bond log. After the top of cement outside the casing is determined, the operator or his representative shall contact the San Angelo District Office and obtain approval for the procedures to be used to perform any required additional cementing operations.** Upon completion of the well, a cementing report shall be filed with the Commission on the prescribed Form W-15 along with a copy of the temperature survey or bond log.



6. All Form W-15's reporting the cementing of surface casing are required to detail in remarks if cement doesn't circulate to the surface to fully explain what remedial cementing measures were performed. This shall include the top of cement found by bond log or temperature survey and the depth of any baskets placed in the well.
7. As required by all drilling permits issued by the Railroad Commission, it is the operator's responsibility to notify the appropriate Commission District Office, at least eight hours prior to running surface casing. This may be done by phone or fax.
8. Surface casing shall be centralized at the shoe, above and below a stage collar or diverting tool, if run, and through usable-quality water zones. In non-deviated holes, pipe centralization as follows is required: a centralizer shall be placed every fourth joint from the cement shoe to the ground surface or to the bottom of the cellar. All centralizers shall meet API spec 10D specifications. In deviated holes, the operator shall provide additional centralization.

Sincerely,

A handwritten signature in black ink, appearing to read "Barry W. Wood". The signature is stylized with a large initial "B" and a long horizontal stroke.

Barry W. Wood, P.E.  
District Director

Tracking No.: 113960

This facsimile L-1 was generated electronically from data submitted to the RRC.

## Instructions

When to File Form L-1:

- with Forms G-1, W-2, and GT-1 for new and deepened gas, oil, and geothermal wells
- with Form W-3 for plugged dry holes
- when sending in a log which was held under a request for confidentiality and the period for confidentiality has not yet expired.

When is Form L-1 NOT required:

- with Forms W-2, G-1, and GT-1 filed for injection wells, disposal wells, water supply wells, service wells, re-test wells, re-classifications, and plugbacks of oil, gas or geothermal wells
- with Form W-3 for plugging of other than a dry hole

Where to File Form L-1:

- with the appropriate Commission district office

Filling out Form L-1:

- Section I and the signature section must be filled out for all wells
- complete only the appropriate part of Section II

Type of log required:

- any wireline survey run for the purpose of obtaining lithology, porosity, or resistivity information
- no more than one such log is required but it must be of the subject well
- if such log is NOT run on the subject well, do NOT substitute any other type of log; just select Section II, Part A below

## SECTION I. IDENTIFICATION

|  |                               |                                |
|--|-------------------------------|--------------------------------|
| Operator<br>Name: APPROACH OPERATING LLC | District<br>No. 7C            | Completion<br>Date: 07/18/2014 |
| Field<br>Name HOLT RANCH (CONSOLIDATED)  | Drilling Permit<br>No. 781796 |                                |
| Lease<br>Name UNIVERSITY 45              | Lease/ID<br>No. 17662         | Well<br>No. 2235HC             |
| County<br>CROCKETT                       | API<br>No. 42- 105-42020      |                                |

## SECTION II. LOG STATUS (Complete either A or B)

☒ A. BASIC ELECTRIC LOG NOT RUN☐ B. BASIC ELECTRIC LOG RUN. (Select one)

- ☐ 1. Confidentiality is requested and a copy of the header for each log that has been run on the well is attached.
- ☐ 2. Confidentiality already granted on basic electric log covering this interval (applicable to deepened wells only).
- ☐ 3. Basic electric log covering this interval already on file with Commission (applicable to deepened wells only).
- ☐ 4. Log attached to (select one):

☐ (a) Form L-1 (this form). If the company/lease name on log is different from that shown in Section I, please enter name on log here: \_\_\_\_\_

Check here if attached log is being submitted after being held confidential. ☐

☐ (b) Form P-7, Application for Discovery Allowable and New Field Designation.

☐ (c) Form W-4, Application for Multiple Completion:

Lease or ID No(s). \_\_\_\_\_

Well No(s). \_\_\_\_\_

Carol Adler

Signature

Name (print)

SR Regulatory Specialist

Title

(817) 989-9000 EXT 2143

Phone

08/28/2014

Date

-FOR RAILROAD COMMISSION USE ONLY-

STATEMENT OF PRODUCTIVITY OF ACREAGE  
ASSIGNED TO PRORATION UNITS

Form P-15

Tracking No.: 113960

This facsimile P-15 was generated electronically  
from data submitted to the RRC.

The undersigned states that he is authorized to make this statement; that he has knowledge of the facts concerning the APPROACH OPERATING LLC ,

UNIVERSITY 45 , No. 2235HC ; that such well is  
LEASE WELL

completed in the HOLT RANCH (CONSOLIDATED) Field, CROCKETT County,

Texas and that the acreage claimed, and assigned to such well for proration purposes as authorized by special rule and as shown on the attached certified plat embraces \_\_\_\_\_

140.0 acres which can reasonably be considered to be productive of hydrocarbons.

- CERTIFICATE

*I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this report, that this report was prepared by me or under my supervision and direction,*

Date 08/28/2014 Signature Carol Adler

Telephone (817) 989-9000 EXT 2143 Title SR Regulatory Specialist  
AREA CODE



## RAILROAD COMMISSION OF TEXAS

1701 N. Congress  
P.O. Box 12967  
Austin, Texas 78701-2967

P-16 Data Sheet

Page 1

Rev. \_\_\_/2014

## Acreage Designation

## SECTION I. OPERATOR INFORMATION

Operator Name: APPROACH OPERATING, LLC

Operator P-5 No.: 028625

Operator Address: 6500 WEST FREEWAY, STE. 800

## SECTION II. WELL INFORMATION

District No.: 7C

County: CROCKETT

Well No.: 2235HC

API No.: 105-42020

Total Lease Acres: 14981.5

Drilling Permit No.: 781796

Lease Name: UNIVERSITY 45

Lease No.: 17662

Field Name: HOLT RANCH (CONSOLIDATED)

Field No.: 42341300

Filer is the owner or lessee, or has been authorized by the owner or lessee, of all or an undivided portion of the mineral estate under each tract for which filer is listed as operator below. For all leases operated by other entities, the number of assigned acres shown are reflected on current Commission records or the filer has been authorized by the current operator to change the assigned acreage of that operator as shown below.

## SECTION III. LISTING OF ALL WELLS IN THE APPLIED-FOR FIELD ON THE SAME ACREAGE AS THE LEASE, POOLED UNIT, OR UNITIZED TRACT DESIGNATED IN SECTION II ABOVE BY FILER

| RRC ID No. or Lease No. | Well No. | H-Horizontal<br>D-Directional<br>V-Vertical | Lease Name    | API No.   | Acres Assigned | Operator Name and Operator No.<br>(if different from filing operator) |
|-------------------------|----------|---|---------------|-----------|----------------|---|
| 247079                  | 3001     | V   | UNIVERSITY 45 | 105-40956 | 218.533        |   |
| 249478                  | 3002     | V   | UNIVERSITY 45 | 105-40968 | 218.533        |   |
| 17662                   | 3003     | V   | UNIVERSITY 45 | 105-40974 | 218.533        |   |
| 247115                  | 2001     | V   | UNIVERSITY 45 | 105-40937 | 178.000        |   |
| 262396                  | 2002     | V   | UNIVERSITY 45 | 105-41209 | 148.600        |   |
| 17662                   | 2003     | V   | UNIVERSITY 45 | 105-41315 | 36.000         |   |
| 17662                   | 2004     | V   | UNIVERSITY 45 | 105-41318 | 93.000         |   |
| 17662                   | 2005     | V   | UNIVERSITY 45 | 105-41320 | 35.000         |   |
| 247078                  | 2101     | V   | UNIVERSITY 45 | 105-40888 | 56.275         |   |
| 247080                  | 2102     | V   | UNIVERSITY 45 | 105-40908 | 56.275         |   |
| 247117                  | 2103     | V   | UNIVERSITY 45 | 105-40931 | 56.275         |   |
| 256244                  | 2104     | V   | UNIVERSITY 45 | 105-41043 | 56.275         |   |
| 249475                  | 2105     | V   | UNIVERSITY 45 | 105-40967 | 56.275         |   |
| 249477                  | 2106     | V   | UNIVERSITY 45 | 105-40971 | 56.275         |   |
| 261177                  | 2107     | V   | UNIVERSITY 45 | 105-41148 | 56.275         |   |
| 260287                  | 2108     | V   | UNIVERSITY 45 | 105-41150 | 56.275         |   |
| 260294                  | 2109     | V   | UNIVERSITY 45 | 105-41174 | 56.275         |   |

Total Well Count &gt;

91

13060.001

&lt; A. Total Assigned Horiz. Acreage

14981.5

&lt; C. Total Assigned Acreage

0.0

&lt; Total Remaining Horiz. Acreage

0.0

&lt; Total Remaining Acreage

1921.499

&lt; B. Total Assigned Vert./Dir. Acreage

0.0

&lt; Total Remaining Vert./Dir. Acreage

## SECTION IV. REMARKS / PURPOSE OF FILING (see instructions)

ACREAGE LIST

Attach Additional Pages As Needed.



No additional pages



Additional Pages: 6 (No. of additional pages)

CERTIFICATION: I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that this report was prepared by me or under my supervision or direction, that I am authorized to make this report, and that the information contained in this report is true, correct, and complete to the best of my knowledge.

Carol Adler

cadler@approachresources.com

Signature

Name and title (type or print)

Email (include email address only if you affirmatively consent to its public release)

6500 West Freeway, Ste. 800 Fort Worth, Texas 76116

817-989-9000

07/17/2014

Address

City,

State,

Zip Code

Tel: Area Code

Number

Date: mo. day yr.



## RAILROAD COMMISSION OF TEXAS

1701 N. Congress  
P.O. Box 12967  
Austin, Texas 78701-2967

P-16 Data Sheet

Page 1

Rev. \_\_\_/2014

## Acreage Designation

## SECTION I. OPERATOR INFORMATION

Operator Name: APPROACH OPERATING, LLC

Operator P-5 No.: 028625

Operator Address: 6500 WEST FREEWAY, STE. 800

## SECTION II. WELL INFORMATION

District No.: 7C

County: CROCKETT

Well No.: 2235HC

API No.: 105-42020

Total Lease Acres: 14981.5

Drilling Permit No.: 781796

Lease Name: UNIVERSITY 45

Lease No.: 17662

Field Name: HOLT RANCH (CONSOLIDATED)

Field No.: 42341300

Filer is the owner or lessee, or has been authorized by the owner or lessee, of all or an undivided portion of the mineral estate under each tract for which filer is listed as operator below. For all leases operated by other entities, the number of assigned acres shown are reflected on current Commission records or the filer has been authorized by the current operator to change the assigned acreage of that operator as shown below.

## SECTION III. LISTING OF ALL WELLS IN THE APPLIED-FOR FIELD ON THE SAME ACREAGE AS THE LEASE, POOLED UNIT, OR UNITIZED TRACT DESIGNATED IN SECTION II ABOVE BY FILER

| RRC ID No. or Lease No. | Well No. | H-Horizontal<br>D-Directional<br>V-Vertical | Lease Name    | API No.   | Acres Assigned | Operator Name and Operator No.<br>(if different from filing operator) |
|-------------------------|----------|---|---------------|-----------|----------------|---|
| 262410                  | 2110     | V   | UNIVERSITY 45 | 105-41210 | 56.275         |   |
| 17662                   | 2111     | V   | UNIVERSITY 45 | 105-41321 | 56.275         |   |
| 17662                   | 2901     | V   | UNIVERSITY 45 | 105-41015 | 25.000         |   |
| 258304                  | 2902     | V   | UNIVERSITY 45 | 105-41085 | 25.000         |   |
| 17662                   | 2903     | V   | UNIVERSITY 45 | 105-41196 | 25.000         |   |
| 17662                   | 1101HB   | H   | UNIVERSITY 45 | 105-41308 | 150.000        |   |
| 17662                   | 1102HB   | H   | UNIVERSITY 45 | 105-41597 | 140.000        |   |
| 17662                   | 2112X    | V   | UNIVERSITY 45 | 105-41377 | 56.275         |   |
| 258170                  | 2201X    | V   | UNIVERSITY 45 | 105-41042 | 25.000         |   |
| 17662                   | 2202HB   | H   | UNIVERSITY 45 | 105-41466 | 230.000        |   |
| 17662                   | 2208HB   | H   | UNIVERSITY 45 | 105-41612 | 170.000        |   |
| 17662                   | 2209HB   | H   | UNIVERSITY 45 | 105-41611 | 180.000        |   |
| 17662                   | 2216HB   | H   | UNIVERSITY 45 | 105-41467 | 200.000        |   |
| 17662                   | 2217HB   | H   | UNIVERSITY 45 | 105-41469 | 190.000        |   |
| 17662                   | 2301HB   | H   | UNIVERSITY 45 | 105-41325 | 254.650        |   |
| 17662                   | 2302HB   | H   | UNIVERSITY 45 | 105-41349 | 254.650        |   |
| 17662                   | 2303HB   | H   | UNIVERSITY 45 | 105-41384 | 254.650        |   |

Total Well Count &gt;

91

13060.001

&lt; A. Total Assigned Horiz. Acreage

14981.5

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0.0

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0.0

&lt; Total Remaining Acreage

1921.499

&lt; B. Total Assigned Vert./Dir. Acreage

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&lt; Total Remaining Vert./Dir. Acreage

## SECTION IV. REMARKS / PURPOSE OF FILING (see instructions)

ACREAGE LIST

Attach Additional Pages As Needed.

☐

No additional pages

☐

Additional Pages: 6 (No. of additional pages)

CERTIFICATION: I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that this report was prepared by me or under my supervision or direction, that I am authorized to make this report, and that the information contained in this report is true, correct, and complete to the best of my knowledge.

Carol Adler

cadler@apporachresources.com

Signature

Name and title (type or print)

Email (include email address only if you affirmatively consent to its public release)

6500 West Freeway, Ste. 800 Fort Worth, Texas 76116

817-989-9000

07/17/2014

Address

City,

State,

Zip Code

Tel: Area Code

Number

Date: mo. day yr.



## RAILROAD COMMISSION OF TEXAS

1701 N. Congress  
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P-16 Data Sheet

Page 1

Rev. \_\_\_/2014

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|-------------------------|----------|---|---------------|-----------|----------------|---|
| 17662                   | 2304HB   | H   | UNIVERSITY 45 | 105-41385 | 254.650        |   |
| 17662                   | 2322HB   | H   | UNIVERSITY 45 | 105-41824 | 254.650        |   |
| 17662                   | 2309HB   | H   | UNIVERSITY 45 | 105-41841 | 254.650        |   |
| 17662                   | 2315HB   | H   | UNIVERSITY 45 | 10/-41842 | 254.650        |   |
| 17662                   | 2321HB   | H   | UNIVERSITY 45 | 105-41823 | 254.6500       |   |
| 17662                   | 2401HB   | H   | UNIVERSITY 45 | 105-41306 | 169.535        |   |
| 17662                   | 2402HB   | H   | UNIVERSITY 45 | 105-41354 | 339.070        |   |
| 17662                   | 2403HB   | H   | UNIVERSITY 45 | 105-41355 | 339.070        |   |
| 17662                   | 701HB    | H   | UNIVERSITY 45 | 105-41273 | 171.900        |   |
| 17662                   | 703HB    | H   | UNIVERSITY 45 | 105-41395 | 171.900        |   |
| 17662                   | 706HA    | H   | UNIVERSITY 45 | 105-41619 | 343.800        |   |
| 17662                   | 708HB    | H   | UNIVERSITY 45 | 105-41621 | 0.000          |   |
| 17662                   | 710HB    | H   | UNIVERSITY 45 | 105-41647 | 343.800        |   |
| 17662                   | 712HA    | H   | UNIVERSITY 45 | 105-41656 | 0.000          |   |
| 17662                   | 803HB    | H   | UNIVERSITY 45 | 105-41249 | 206.280        |   |
| 17662                   | 804HB    | H   | UNIVERSITY 45 | 105-41352 | 206.280        |   |
| 17662                   | 805HB    | H   | UNIVERSITY 45 | 105-41351 | 206.280        |   |

Total Well Count &gt;

91

13060.001

&lt; A. Total Assigned Horiz. Acreage

14981.5

&lt; C. Total Assigned Acreage

&lt; Total Remaining Horiz. Acreage

0.0

&lt; Total Remaining Acreage

1921.499

&lt; B. Total Assigned Vert./Dir. Acreage

0.0

&lt; Total Remaining Vert./Dir. Acreage

## SECTION IV. REMARKS / PURPOSE OF FILING (see instructions)

ACREAGE LIST

Attach Additional Pages As Needed.



No additional pages



Additional Pages: 5 (No. of additional pages)

CERTIFICATION: I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that this report was prepared by me or under my supervision or direction, that I am authorized to make this report, and that the information contained in this report is true, correct, and complete to the best of my knowledge.

Carol Adler

cadler@approachresources.com

Signature

Name and title (type or print)

Email (include email address only if you affirmatively consent to its public release)

6500 West Freeway, Ste. 800 Fort Worth, Texas 76116

817-989-9000

07/17/2014

Address

City,

State,

Zip Code

Tel: Area Code

Number

Date: mo. day yr.





## RAILROAD COMMISSION OF TEXAS

1701 N. Congress  
P.O. Box 12967  
Austin, Texas 78701-2967

P-16 Data Sheet

Page 1

Rev. \_\_\_/2014

## Acreage Designation

## SECTION I. OPERATOR INFORMATION

Operator Name: APPROACH OPERATING, LLC

Operator P-5 No.: 028625

Operator Address: 6500 WEST FREEWAY, STE. 800

## SECTION II. WELL INFORMATION

District No.: 7C

County: CROCKETT

Well No.: 2235HC

API No.: 105-42020

Total Lease Acres: 14981.5

Drilling Permit No.: 781796

Lease Name: UNIVERSITY 45

Lease No.: 17662

Field Name: HOLT RANCH (CONSOLIDATED)

Field No.: 42341300

Filer is the owner or lessee, or has been authorized by the owner or lessee, of all or an undivided portion of the mineral estate under each tract for which filer is listed as operator below. For all leases operated by other entities, the number of assigned acres shown are reflected on current Commission records or the filer has been authorized by the current operator to change the assigned acreage of that operator as shown below.

## SECTION III. LISTING OF ALL WELLS IN THE APPLIED-FOR FIELD ON THE SAME ACREAGE AS THE LEASE, POOLED UNIT, OR UNITIZED TRACT DESIGNATED IN SECTION II ABOVE BY FILER

| RRC ID No. or Lease No. | Well No. | H-Horizontal<br>D-Directional<br>V-Vertical | Lease Name    | API No.   | Acres Assigned | Operator Name and Operator No.<br>(if different from filing operator) |
|-------------------------|----------|---|---------------|-----------|----------------|---|
| 17662                   | 806HB    | H   | UNIVERSITY 45 | 105-41555 | 206.280        |   |
| 17662                   | 839HB    | H   | UNIVERSITY 45 | 105-41815 | 206.280        |   |
| 17662                   | 901H     | H   | UNIVERSITY 45 | 105-41283 | 158.680        |   |
| 17662                   | 902HB    | H   | UNIVERSITY 45 | 105-41293 | 158.680        |   |
| 17662                   | 903HB    | H   | UNIVERSITY 45 | 105-41444 | 158.680        |   |
| 17662                   | 904HB    | H   | UNIVERSITY 45 | 105-41443 | 158.680        |   |
| 17662                   | 905HA    | H   | UNIVERSITY 45 | 105-41556 | 158.680        |   |
| 17662                   | 907HB    | H   | UNIVERSITY 45 | 105-41810 | 158.680        |   |
| 17662                   | 913HB    | H   | UNIVERSITY 45 | 105-41807 | 158.680        |   |
| 17662                   | 917HB    | H   | UNIVERSITY 45 | 105-41809 | 158.680        |   |
| 17662                   | 919HB    | H   | UNIVERSITY 45 | 105-41787 | 158.680        |   |
| 17662                   | 923HB    | H   | UNIVERSITY 45 | 105-41799 | 158.680        |   |
| 17662                   | 927HB    | H   | UNIVERSITY 45 | 105-41775 | 158.680        |   |
| 17662                   | 931HB    | H   | UNIVERSITY 45 | 105-41755 | 158.680        |   |
| 17662                   | 933HC    | H   | UNIVERSITY 45 | 105-41756 | 158.680        |   |
| 17662                   | 2432HB   | H   | UNIVERSITY 45 | 105-41888 | 169.535        |   |
| 17662                   | 2444HB   | H   | UNIVERSITY 45 | 105-41886 | 169.535        |   |

Total Well Count &gt;

91

13060.001

0.0

1921.499

0.0

&lt; A. Total Assigned Horiz. Acreage

&lt; Total Remaining Horiz. Acreage

&lt; B. Total Assigned Vert./Dir. Acreage

&lt; Total Remaining Vert./Dir. Acreage

14981.5

0.0

&lt; C. Total Assigned Acreage

&lt; Total Remaining Acreage

## SECTION IV. REMARKS / PURPOSE OF FILING (see instructions)

ACREAGE LIST

Attach Additional Pages As Needed.



No additional pages



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## RAILROAD COMMISSION OF TEXAS

1701 N. Congress  
P.O. Box 12967  
Austin, Texas 78701-2967

P-16 Data Sheet

Page 1

Rev. \_\_\_/2014

## Acreage Designation

## SECTION I. OPERATOR INFORMATION

Operator Name: APPROACH OPERATING, LLC

Operator P-5 No.: 028625

Operator Address: 6500 WEST FREEWAY, STE. 800

## SECTION II. WELL INFORMATION

District No.: 7C

County: CROCKETT

Well No.: 2235HC

API No.: 105-42020

Total Lease Acres: 14981.5

Drilling Permit No.: 781796

Lease Name: UNIVERSITY 45

Lease No.: 17662

Field Name: HOLT RANCH (CONSOLIDATED)

Field No.: 42341300

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| RRC ID No. or Lease No. | Well No. | H-Horizontal<br>D-Directional<br>V-Vertical | Lease Name    | API No.   | Acres Assigned | Operator Name and Operator No.<br>(if different from filing operator) |
|-------------------------|----------|---|---------------|-----------|----------------|---|
| 17662                   | 2438HB   | H   | UNIVERSITY 45 | 105-41887 | 339.050        |   |
| 17662                   | 2340HB   | H   | UNIVERSITY 45 | 105-41894 | 230.000        |   |
| 17662                   | 2409HB   | H   | UNIVERSITY 45 | 105-41901 | 169.535        |   |
| 17662                   | 2415HB   | H   | UNIVERSITY 45 | 105-41902 | 280.000        |   |
| 17662                   | 2421HB   | H   | UNIVERSITY 45 | 105-41903 | 200.000        |   |
| 17662                   | 705HC    | H   | UNIVERSITY 45 | 105-41928 | 206.280        |   |
| 17662                   | 709HB    | H   | UNIVERSITY 45 | 105-41929 | 206.280        |   |
| 17662                   | 713HC    | H   | UNIVERSITY 45 | 105-41934 | 206.280        |   |
| 17662                   | 715HB    | H   | UNIVERSITY 45 | 105-41935 | 206.280        |   |
| 17662                   | 2126HB   | H   | UNIVERSITY 45 | 105-41984 | 171.900        |   |
| 17662                   | 2130HC   | H   | UNIVERSITY 45 | 105-41983 | 171.900        |   |
| 17662                   | 2120HB   | H   | UNIVERSITY 45 | 105-41975 | 171.900        |   |
| 17662                   | 2124HC   | H   | UNIVERSITY 45 | 105-41982 | 171.900        |   |
| 17662                   | 2114HB   | H   | UNIVERSITY 45 | 105-41881 | 171.900        |   |
| 17662                   | 2118HC   | H   | UNIVERSITY 45 | 105-41981 | 171.900        |   |
| 17662                   | 840HB    | H   | UNIVERSITY 45 | 105-41999 | 206.280        |   |
| 17662                   | 838HC    | H   | UNIVERSITY 45 | 105-42001 | 190.000        |   |

Total Well Count &gt;

91

13060.001

&lt; A. Total Assigned Horiz. Acreage

14981.5

&lt; C. Total Assigned Acreage

0.0

&lt; Total Remaining Horiz. Acreage

0.0

&lt; Total Remaining Acreage

1921.499

&lt; B. Total Assigned Vert./Dir. Acreage

0.0

&lt; Total Remaining Vert./Dir. Acreage

## SECTION IV. REMARKS / PURPOSE OF FILING (see instructions)

ACREAGE LIST

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## RAILROAD COMMISSION OF TEXAS

**1701 N. Congress  
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Austin, Texas 78701-2967**

## P-16 Data Sheet

Page 1  
Rev. \_\_/2014

## Acreage Designation

## SECTION I. OPERATOR INFORMATION

|   |                                 |
|---|---------------------------------|
| <b>Operator Name:</b> APPROACH OPERATING, LLC                               | <b>Operator P-5 No.:</b> 028625 |
| <b>Operator Address:</b> 6500 WEST FREEWAY STE. 800 FORT WORTH, TEXAS 76116 |                                 |

## SECTION II. WELL INFORMATION

|  |                                    |
|--|------------------------------------|
| <b>District No.:</b> 7C                      | <b>County:</b> CROCKETT            |
| <b>Well No.:</b> 2235HC                      | <b>API No.:</b> 105-42020          |
| <b>Total Lease Acres:</b> 14981.5            | <b>Drilling Permit No.:</b> 781796 |
| <b>Lease Name:</b> UNIVERSITY 45             | <b>Lease No.:</b> 17662            |
| <b>Field Name:</b> HOLT RANCH (CONSOLIDATED) | <b>Field No.:</b> 42341300         |

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SECTION III. LISTING OF ALL WELLS IN THE APPLIED-FOR FIELD ON THE SAME ACREAGE AS THE LEASE, POOLED UNIT, OR UNITIZED TRACT DESIGNATED IN SECTION II ABOVE BY FILER

[illegible]

|                    |    |           |  |         |                             |
|--------------------|----|-----------|--|---------|-----------------------------|
| Total Well Count > | 91 | 13060.001 | < A. Total Assigned Horiz. Acreage     | 14981.5 | < C. Total Assigned Acreage |
|                    |    | 0.0       | < Total Remaining Horiz. Acreage       | 0.0     | < Total Remaining Acreage   |
|                    |    | 1921.499  | < B. Total Assigned Vert./Dir. Acreage |         |                             |
|                    |    | 0.0       | < Total Remaining Vert./Dir. Acreage   |         |                             |

## SECTION IV. REMARKS / PURPOSE OF FILING (see instructions)

## ACREAGE LIST

**Attach Additional Pages As Needed.** ☐ No additional pages ☒ Additional Pages: 5 (No. of additional pages)

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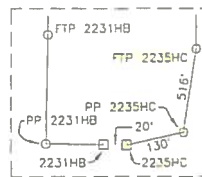
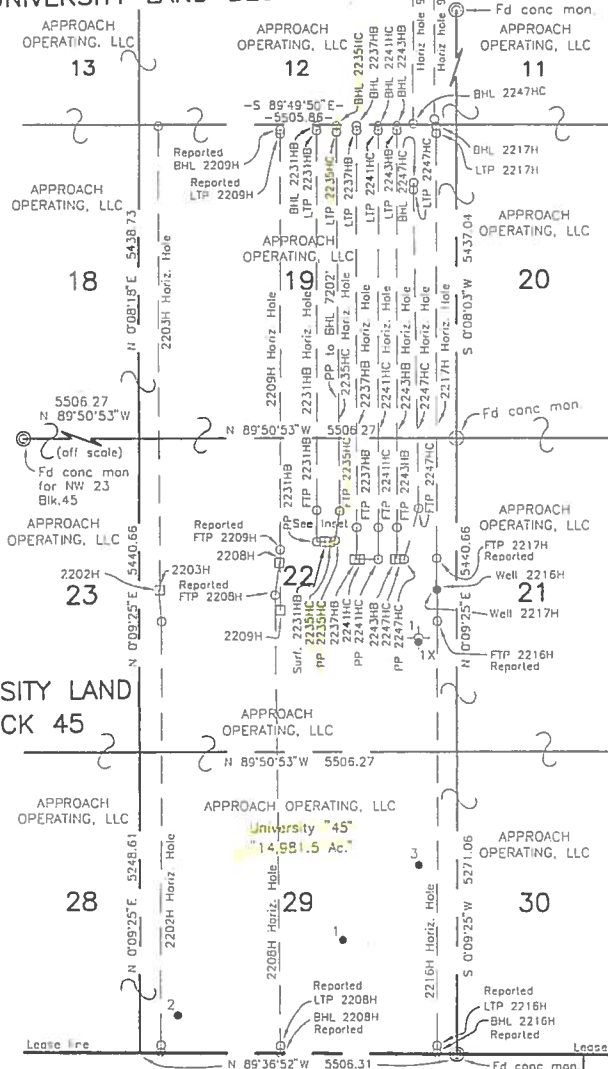
Date: mo. day yr.

SECTION VII. REMARKS



# UNIVERSITY LAND BLOCK 45

8-18-2014 Crockett County 906/67 (30)



INSET  
no scale

Perpendicular distances off  
2235HC Univ. 45' horizontal hole  
FTP 2231HB (proposed) = 395'  
LTP 2231HB (proposed) = 341'  
FTP 2237HB (proposed) = 345'  
LTP 2237HB (proposed) = 360'

REPORTED 1st TAKE POINT  
MD = 6695'  
516 ft. from Pen. Pt. 2235HC  
9439 ft. FSL & 7436 ft. FEL of lease  
1265 ft. FNL and 2035 ft. FEL  
University Land Survey 22, Block 45  
Y = 462,828 ft.  
X = 1,716,900 ft.  
Latitude : 30.9361° N  
Longitude : 101.2363° W

REPORTED LAST TAKE POINT  
MD = 13,279'  
109 ft. from BHL 2235HC  
16,014 ft. FSL & 7491 ft. FEL of lease  
127 ft. FNL and 2089 ft. FEL  
University Land Survey 19, Block 45  
Y = 469,404 ft.  
X = 1,716,862 ft.  
Latitude : 30.9542° N  
Longitude : 101.2366° W  
5942 ft. to nearest lease corner

## RUNNELS COUNTY SCHOOL LAND NO. 2

APPROACH OPERATING, LLC  
Baker "B" - lease

### LEGEND

- = Surface Location (Surf.)
- = Penetration Point
- = Surface well (as drilled)
- FTP = 1st Take Point
- LTP = Last Take Point
- BHL = Bottom Hole Location

Located N 5'W 15 miles from Ozona, Texas.

"Ac" = Acreage claimed by operator  
to be in lease.

0 2000 4000

SCALE: 1"=2000'

FIELD COUNTY OPERATOR  
LEASE  
WELL NO.  
ELEVATION  
LOCATION

Crockett  
Approach Operating, LLC  
University "45"  
2235HC  
2618 ft. grd.  
1803 ft. FNL and 2240 ft. FEL of University Land Survey 22,  
Block 45, Crockett County, Texas.

### SURFACE LOCATION

Y = 462,290 ft.  
X = 1,716,694 ft.  
Latitude : 30.9346° N  
Longitude : 101.2370° W  
1803 ft. FNL and 2240 ft. FEL  
University Land Survey 22, Block 45  
8900 ft. FSL of lease  
7641 ft. FEL of lease

### REPORTED PENETRATION POINT

MD = 5603'  
130 ft. from Surface 2235HC  
Y = 462,318 ft.  
X = 1,716,821 ft.  
Latitude : 30.9347° N  
Longitude : 101.2366° W  
1775 ft. FNL and 2113 ft. FEL  
University Land Survey 22, Block 45  
8928 ft. FSL of lease  
7514 ft. FEL of lease

### REPORTED BOTTOMHOLE LOC.

MD = 13,388'  
Y = 469,513 ft.  
X = 1,716,857 ft.  
Latitude : 30.9545° N  
Longitude : 101.2366° W  
18 ft. FNL and 2094 ft. FEL  
University Land Survey 19, Block 45  
16,123 ft. FSL & 7496 ft. FEL of lease  
5842 ft. to nearest lease corner

### NOTES

Courses, distances and coordinates shown  
hereon are of the Texas Coordinate  
System of 1927 - Central Zone.

The survey construction shown  
hereon is sufficient for staking this  
location and no other purpose.

The lease information shown hereon  
is based on information provided by  
operator or its representatives and  
was relied upon by surveyor for the  
purpose of staking this location. Said  
surveyor was not requested to verify  
lease and accepts no responsibility for  
the accuracy or status of this information.

Position of surveys shown hereon  
is based on Frank Friends survey  
of University Lands Blocks 38 to 57  
dated July 24, 1937 on file in the  
General Land Office

Reported positions and take point information as shown is  
based on a Survey Report provided by operator.

The above sketch represents the location as staked on the  
ground and is for permit purposes only.

Staked the 7th day of March, 2014

*Thomas J. Houston*

Thomas J. Houston  
Registered Professional Land Surveyor No. 4261  
FIRM NUMBER 10045600

OFFICE OF  
WILSON LAND SURVEYING, INC.

1514 W. BEAUREGARD AVE.  
P. O. BOX 3326 PH 325-653-3916  
SAN ANGELO, TEXAS 76902

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