

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RCVD MAR 18 '10  
OIL CONS. DIV.

DIST. 3

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

RECEIVED

DEC 04 2007

1a. Type of Work  
DRILL

5. Lease Number  
USA SF-078092  
Unit Reporting Number

1b. Type of Well  
GAS

Bureau of Land Management  
Farmington Field Office

6. If Indian, All. or Tribe

2. Operator  
**BURLINGTON**  
RESOURCES Oil & Gas Company, LP

7. Unit Agreement Name

3. Address & Phone No. of Operator  
PO Box 4289, Farmington, NM 87499  
(505) 326-9700

8. Farm or Lease Name  
Douthit C Federal  
9. Well Number  
#2F

Location of Well  
Unit K (NESW), 1880' FSL & 2280' FWL

10. Field, Pool, Wildcat  
Basin Dakota

Latitude 36.54414' N  
Longitude 107.99245' W

11. Sec., Twn, Rge, Mer. (NMPM)  
Sec. 27, T27N, R11W

API # 30-045- 34520

14. Distance in Miles from Nearest Town  
13 miles/Bloomfield

12. County  
San Juan  
13. State  
NM

15. Distance from Proposed Location to Nearest Property or Lease Line  
1880'

16. Acres in Lease  
2560.000

17. Acres Assigned to Well  
DK 320 (S/2)

18. Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease  
1582' from Douthit Federal #2E

19. Proposed Depth  
6653'

20. Rotary or Cable Tools  
Rotary

21. Elevations (DF, FT, GR, Etc.)  
6393' GL

22. Approx. Date Work will Start  
BLM'S APPROVAL OR ACCEPTANCE OF THIS  
ACTION DOES NOT RELIEVE THE LESSEE AND  
OPERATOR FROM OBTAINING ANY OTHER  
AUTHORIZATION REQUIRED FOR OPERATIONS  
ON FEDERAL AND INDIAN LANDS

23. Proposed Casing and Cementing Program  
See Operations Plan attached

24. Authorized by: Sasha Spangler  
Sasha Spangler (Regulatory Technician)

11-28-07  
Date

PERMIT NO.

APPROVAL DATE

APPROVED BY [Signature]

TITLE AFM

DATE 3/18/2010

Archaeological Report attached

Threatened and Endangered Species Report attached

NOTE: This format is issued in lieu of U.S. BLM Form 3160-3

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or presentations as to any matter within its jurisdiction.

Example Master Plan Type 34

Bond Numbers NMB-000015 and NMB-000089

NOTIFY AZTEC OCD 24 HRS.  
PRIOR TO CASING & CEMENT

MAR 19 2010

NMOCD

This action is subject to technical and  
procedural review pursuant to 43 CFR 3165.3  
and appeal pursuant to 43 CFR 3165.4

DRILLING OPERATIONS AUTHORIZED ARE  
SUBJECT TO COMPLIANCE WITH ATTACHED  
"GENERAL REQUIREMENTS".

DISTRICT I  
1525 N. French Dr., Hobbs, N.M. 88240

DISTRICT II  
1301 W. Grand Ave., Artesia, N.M. 88210

DISTRICT III  
1000 Rio Brazos Rd., Aztec, N.M. 87410

DISTRICT IV  
1220 South St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-102

Revised October 12, 2005

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

DEC 04 2007

☐ AMENDED REPORT

Bureau of Land Management

Farmington Field Office

WELL LOCATION AND ACREAGE DEDICATION PLAT

|                              |  |  |  |                             |                     |
|------------------------------|--|--|--|-----------------------------|---------------------|
| 1 API Number<br>30-045-39520 |  | 2 Pool Code<br>71599   |  | 3 Pool Name<br>Basin Dakota |                     |
| 4 Property Code<br>6960      |  | 5 Property Name<br>DOUTHIT C FEDERAL                         |  |                             | 6 Well Number<br>2F |
| 7 OGRID No.<br>14538         |  | 8 Operator Name<br>BURLINGTON RESOURCES OIL & GAS COMPANY LP |  |                             | 9 Elevation<br>6393 |

10 Surface Location

| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County   |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|----------|
| K             | 27      | 27-N     | 11-W  |         | 1880          | SOUTH            | 2280          | WEST           | SAN JUAN |

11 Bottom Hole Location If Different From Surface

| UL or lot no.                 | Section | Township | Range              | Lot Idn | Feet from the         | North/South line | Feet from the | East/West line | County |
|-------------------------------|---------|----------|--------------------|---------|-----------------------|------------------|---------------|----------------|--------|
| K                             |         |          |                    |         |                       |                  |               |                |        |
| 12 Dedicated Acres<br>320 S/2 |         |          | 13 Joint or Infill |         | 14 Consolidation Code |                  | 15 Order No.  |                |        |

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

|   |  |                               |  |                               |  |  |  |  |  |
|---|--|-------------------------------|--|-------------------------------|--|--|--|--|--|
| 16<br>FD. 2 1/2" BC.<br>1913 G.L.O.   |  | 27                            |  | USA SF-078092                 |  | LAT: 36.54414° N. (NAD 83)<br>LONG: 107.99245° W. (NAD 83)<br>LAT: 36°32.6479' N. (NAD 27)<br>LONG: 107°59.5095' W. (NAD 27) |  | 17 OPERATOR CERTIFICATION  |  |
|   |  |                               |  |                               |  |  |  | I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or undivided mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.<br><br>Tracey N. Monroe<br>Signature: _____ Date: 11/16/07<br>Printed Name: _____ |  |
| N 00°01'19" W<br>5274.27' (C)   |  | 2280'                         |  | 1880'                         |  | FD. 2 1/2" BC.<br>1913 G.L.O.  |  | 18 SURVEYOR CERTIFICATION  |  |
| NOTE: CALC'D. BY CARRYING BEARING AND DISTANCE FROM EAST HALF OF SOUTH LINE THROUGH WEST HALF OF SOUTH LINE |  | S 89°54'26" W<br>2637.98' (C) |  | FD. 2 1/2" BC.<br>1913 G.L.O. |  | S 89°54'26" W<br>2637.98' (M)  |  | I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.<br><br>DECEMBER 21 2006 RUSH<br>Date of Survey<br>Signature and Seal of Professional Surveyor:<br>8894<br>Certificate Number   |  |

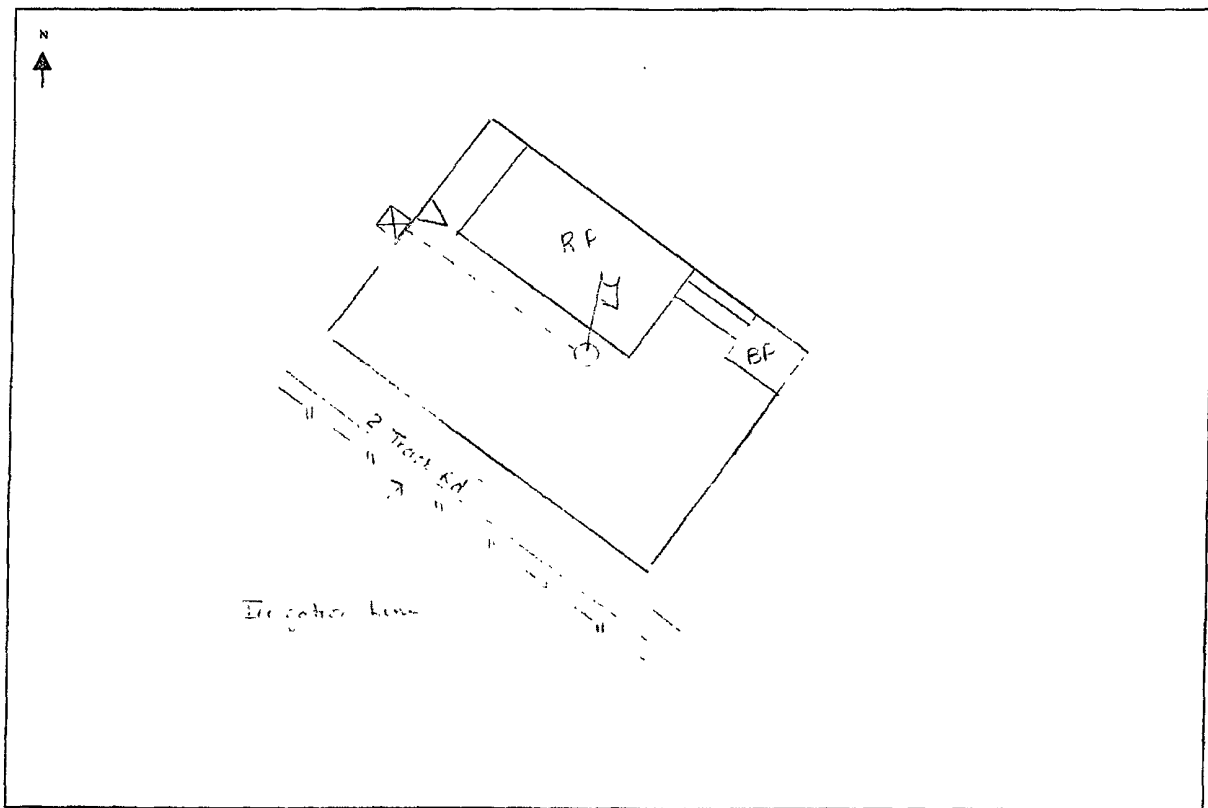


TECHNICAL SERVICES  
A CORROSION COMPANY

### CATHODIC PROTECTION PLAN FOR NEW WELLS

WELL NAME Douthett C Federal #2F LEGALS K-27-27-11 COUNTY San Juan

PURPOSED C.P. SYSTEM: Drill GB and set 2 well sales on NW edge of location. Travel approx 1100' at #5 rec from proposed #1 well sales



| EXISTING WELLHEAD | METER HOUSE | G.B. | POWER SOURCE | CABLE | NEW WELL | OVERHEAD A.C. |
|-------------------|-------------|------|--------------|-------|----------|---------------|
|                   |             |      |              |       |          |               |

COMMENTS: Good sales. No A/C was on N side of CR 7100 (Power)

NEAREST POWER SOURCE On CR 7100 DISTANCE: 1400'

PIPELINES IN AREA: Nat. Transit Line

TECHNICIAN: John H. Hines DATE: 11/20/07

# PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

DOUTHIT C FEDERAL 2F

DEVELOPMENT

|   |                             |                             |                          |                    |   |
|---|-----------------------------|-----------------------------|--------------------------|--------------------|---|
| Lease:  |                             | AFE #: WAN.ZA2.5827         |                          | AFE \$: 560,319.20 |   |
| Field Name: hBR_SAN JUAN                                  |                             | Rig: Bearcat Rig 4          |                          | State: NM          | County: SAN JUAN  |
| Geologist:  |                             | Phone:                      |                          | Geophysicist:      |   |
| Geoscientist: Riley, Brook                                |                             | Phone: +1 505-324-6108      |                          | Prod. Engineer:    |   |
| Res. Engineer: McKee, Cory J                              |                             | Phone: 505-326-9826         |                          | Proj. Field Lead:  |   |
| <b>Primary Objective (Zones):</b>                         |                             |                             |                          |                    |   |
| Zone  | Zone Name                   |                             |                          |                    |   |
| FRR   | BASIN DAKOTA (PRORATED GAS) |                             |                          |                    |   |
| <b>Location:</b> Surface Datum Code: NAD 27 Straight Hole |                             |                             |                          |                    |   |
| Latitude: 36.544132                                       | Longitude: -107.991828      | X:                          | Y:                       | Section: 27        | Range: 011W   |
| Footage X: 2280 FWL                                       | Footage Y: 1880 FSL         | Elevation: 6393 (FT)        | Township: 027N           |                    |   |
| Tolerance:  |                             |                             |                          |                    |   |
| Location Type: Year Round                                 |                             | Start Date (Est.): 1/1/2008 |                          | Completion Date:   |   |
| Formation Data: Assume KB = 6405                          |                             | Units = FT                  |                          |                    |   |
| Formation Call & Casing Points                            | Depth (TVD in Ft)           | SS (Ft)                     | Depletion (Yes/No)       | BHP (PSIG)         | BHT   |
| Total Depth   | 0                           | 6405                        | <input type="checkbox"/> |                    |   |
| Surface Casing  | 320                         | 6085                        | <input type="checkbox"/> |                    | 12-1/4 hole. 320' 8 5/8" 24 ppf, J-55, STC casing. Cement with 319 cuft. Circulate cement to surface. |
| OJO ALAMO   | 895                         | 5510                        | <input type="checkbox"/> |                    |   |
| KIRTLAND  | 1006                        | 5399                        | <input type="checkbox"/> |                    |   |
| FRUITLAND   | 1689                        | 4716                        | <input type="checkbox"/> |                    | Possible Gas  |
| PICTURED CLIFFS   | 2001                        | 4404                        | <input type="checkbox"/> |                    |   |
| LEWIS   | 2168                        | 4237                        | <input type="checkbox"/> |                    |   |
| HUERFANITO BENTONITE                                      | 2417                        | 3988                        | <input type="checkbox"/> |                    |   |
| CHACRA  | 2859                        | 3546                        | <input type="checkbox"/> |                    |   |
| MASSIVE CLIFF HOUSE                                       | 3545                        | 2860                        | <input type="checkbox"/> |                    | Gas   |
| MENEFEE   | 3608                        | 2797                        | <input type="checkbox"/> |                    |   |
| MASSIVE POINT LOOKOUT                                     | 4418                        | 1987                        | <input type="checkbox"/> |                    |   |
| MANCOS  | 4815                        | 1590                        | <input type="checkbox"/> |                    |   |
| UPPER GALLUP  | 5503                        | 902                         | <input type="checkbox"/> |                    |   |
| GREENHORN   | 6376                        | 29                          | <input type="checkbox"/> |                    |   |
| GRANEROS  | 6433                        | -28                         | <input type="checkbox"/> |                    |   |
| TWO WELLS   | 6491                        | -86                         | <input type="checkbox"/> | 1050               | Gas   |
| PAGUATE   | 6537                        | -132                        | <input type="checkbox"/> |                    |   |
| CUBERO  | 6597                        | -192                        | <input type="checkbox"/> |                    |   |
| ENCINAL   | 6639                        | -234                        | <input type="checkbox"/> |                    |   |
| TOTAL DEPTH DK  | 6653                        | -248                        | <input type="checkbox"/> |                    | 7 7/8" Hole. 4-1/2", 11.6 ppf, N-80 LTC casing. Cement with 1983 cuft. Circulate cement to surface.   |
| <b>Reference Wells:</b>                                   |                             |                             |                          |                    |   |
| Reference Type  | Well Name                   |                             | Comments                 |                    |   |
| Production  | Douthit Fed C #2            |                             | 45-06241                 |                    |   |

# PROJECT PROPOSAL - New Drill / Sidetrack

DOUTHIT C FEDERAL 2F

DEVELOPMENT

|                         |   |                                 |                                       |
|-------------------------|---|---------------------------------|---------------------------------------|
| <b>Logging Program:</b> |   |                                 |                                       |
| Intermediate Logs:      | <input type="checkbox"/> Log only if show | <input type="checkbox"/> GR/ILD | <input type="checkbox"/> Triple Combo |

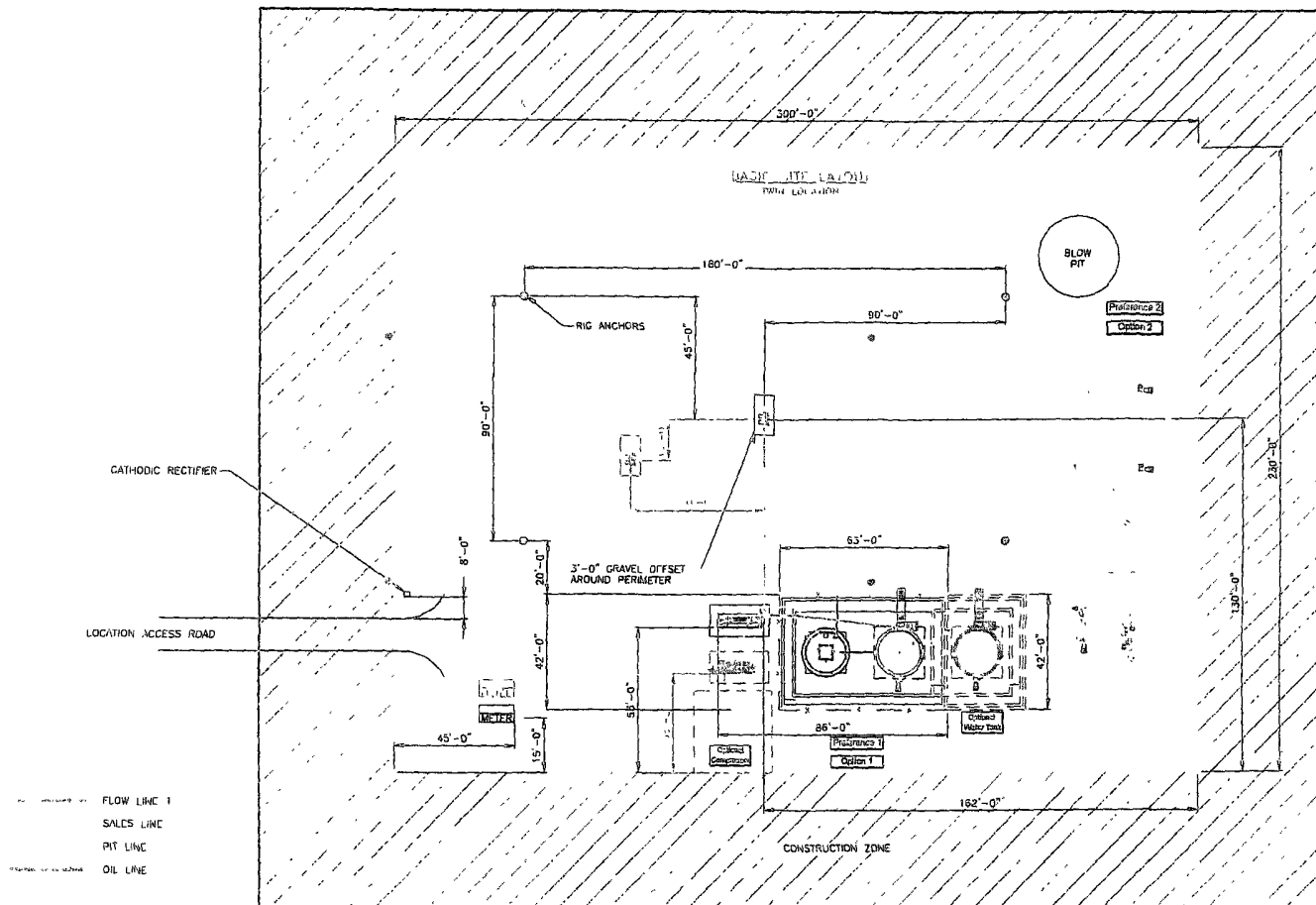
|                                    |                                       |                                   |                              |                                |                              |                              |   |
|------------------------------------|---------------------------------------|-----------------------------------|------------------------------|--------------------------------|------------------------------|------------------------------|---|
| TD Logs:                           | <input type="checkbox"/> Triple Combo | <input type="checkbox"/> Dipmeter | <input type="checkbox"/> RFT | <input type="checkbox"/> Sonic | <input type="checkbox"/> VSP | <input type="checkbox"/> TDT | <input checked="" type="checkbox"/> Other |
| Bott. perf 20 ft above TD. GR_CBL. |                                       |                                   |                              |                                |                              |                              |   |

|                                |              |                  |                |                       |                |
|--------------------------------|--------------|------------------|----------------|-----------------------|----------------|
| <b>Additional Information:</b> |              |                  |                |                       |                |
| <b>Log Type</b>                | <b>Stage</b> | <b>From (Ft)</b> | <b>To (Ft)</b> | <b>Tool Type/Name</b> | <b>Remarks</b> |

Comments: Location/Tops/Logging - DK 27N11W27SW2 Stake at 1880' FSL & 2280' FWL.

Zones - DK 27N11W27SW2

General/Work Description -



SEE SHEET 3.2 FOR TYPING DETAILS  
ALL UNDERGROUND PIPING IS TO BE SHOWN A MIN. OF 3'-0" TOP

SHEET 1 OF 5

|             |  |  |  |  |  |  |  |  |  |                    |          |       |                    |             |  |  |                           |                               |                                      |                     |
|-------------|--|--|--|--|--|--|--|--|--|--------------------|----------|-------|--------------------|-------------|--|--|---------------------------|-------------------------------|--------------------------------------|---------------------|
|             |  |  |  |  |  |  |  |  |  | ENGINEERING REVIEW |          |       | REFERENCE DRAWINGS |             | CONOCOPHILLIPS<br>HIGH PRESSURE 3 PHASE<br>FACILITY DIAGRAM- SITE LAYOUT |  |                           |                               |                                      |                     |
|             |  |  |  |  |  |  |  |  |  | DISCIPLINE         | REVIEWED | DATE  | NO.                | DESCRIPTION |  |  |                           |                               |                                      |                     |
|             |  |  |  |  |  |  |  |  |  | PROCESS            |          |       |                    |             |  | CONOCOPHILLIPS<br>SAN JUAN BUSINESS UNIT | CLIENT USE<br>DESIGNED BY | CLIENT APPRO<br>STYLE, NUMBER | ISSUED DATE<br>CONTRACT DATE 11/2/97 | SHEET NO.<br>1 OF 5 |
|             |  |  |  |  |  |  |  |  |  | TECHNICAL          |          |       |                    |             |  |  |                           |                               |                                      |                     |
|             |  |  |  |  |  |  |  |  |  | PIPING             |          |       |                    |             |  |  |                           |                               |                                      |                     |
|             |  |  |  |  |  |  |  |  |  | ELECTRICAL         |          |       |                    |             |  |  |                           |                               |                                      |                     |
|             |  |  |  |  |  |  |  |  |  | I & C              |          |       |                    |             |  |  |                           |                               |                                      |                     |
|             |  |  |  |  |  |  |  |  |  | CIVIL/STRUCTURAL   |          |       |                    |             |  |  |                           |                               |                                      |                     |
| DESCRIPTION |  |  |  |  |  |  |  |  |  | DATE               | BY       | CHK'D | ENG                | DESC        | PROJ   | HP3PHASE-REV1                            |                           |                               |                                      |                     |

SAN JUAN BUSINESS UNIT

HP3PHASE-REV1

**Directions from the Post Office in Bloomfield, NM to**

**Burlington Resources Oil & Gas Company LP – Douthit C Federal No. 2F**

**1880' FSL & 2280' FWL, Section 27, T-27-N, R-11-W, N.M.P.M., San Juan County, New Mexico**

From the Post Office in Bloomfield, New Mexico.

Travel in an easterly direction on Highway 64 for 0.4 miles.

Turn right and travel southerly on Highway 550 for 11.7 miles to M.P. 139.8.

Turn right on C.R. 7100 (Chaco Plant road) and travel in a southwesterly direction for 1.0 miles.

Turn left and travel in an southeasterly direction on N.A.P.I. access two-track for 0.1 miles to new location on left side of road adjacent to rectangular field.