District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

**State of New Mexico**
**Energy Minerals and Natural Resources**
**Oil Conservation Division**
**1220 South St. Francis Dr.**
**Santa Fe, NM 87505**

Form C-101
Revised July 18, 2013

☒ AMENDED REPORT

# APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

| 1. Operator Name and Address | 2. OGRID Number |
|---|---|
| BC Operating, Inc.<br>P.O. Box 50820<br>Midland, Texas 79710 | 160825 |
| | 3. API Number 30-015-42999 |

| 4. Property Code | 5. Property Name | 6. Well No. |
|---|---|---|
| 314340 | Cavegirl 31 State | 1H |

## 7. Surface Location

| UL - Lot | Section | Township | Range | Lot Idn | Feet from | N/S Line | Feet From | E/W Line | County |
|---|---|---|---|---|---|---|---|---|---|
| A | 6 | 24S | 25E | | 240 | North | 360 | East | Eddy |

## 8. Proposed Bottom Hole Location

| UL - Lot | Section | Township | Range | Lot Idn | Feet from | N/S Line | Feet From | E/W Line | County |
|---|---|---|---|---|---|---|---|---|---|
| A | 31 | 23S | 25E | | 240 | North | 360 | East | Eddy |

## 9. Pool Information

| Pool Name | Pool Code |
|---|---|
| Crooked Creek; Wolfcamp East (Gas) | 75460 |

## Additional Well Information

| 11. Work Type | 12. Well Type | 13. Cable/Rotary | 14. Lease Type | 15. Ground Level Elevation |
|---|---|---|---|---|
| New Well | Gas | Rotary | State | 3843' |
| **16. Multiple** | **17. Proposed Depth** | **18. Formation** | **19. Contractor** | **20. Spud Date** |
| No | 8600' TVD/13,700'MD | Wolfcamp | TBD | 10/01/15 |

| Depth to Ground water | Distance from nearest fresh water well | Distance to nearest surface water |
|---|---|---|
| | | |

☒ **We will be using a closed-loop system in lieu of lined pits**

## 21. Proposed Casing and Cement Program

| Type | Hole Size | Casing Size | Casing Weight/ft | Setting Depth | Sacks of Cement | Estimated TOC |
|---|---|---|---|---|---|---|
| Surface | 16" | 13 3/8" | 48# | 400' | 300 | 0' |
| Intermediate | 12 1/4" | 9 5/8" | 40# | 3100' | 1240 | 0' |
| Production | 8 3/4" | 5 1/2" | 17# | 13,700' | 2250 | 0' |

**Casing/Cement Program: Additional Comments**

## 22. Proposed Blowout Prevention Program

| Type | Working Pressure | Test Pressure | Manufacturer |
|---|---|---|---|
| Double Ram Annular | 3000# | 2000# | Hydrill/Shaeffer |

| 23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief.<br>**I further certify that I have complied with 19.15.14.9 (A) NMAC ☒ and/or 19.15.14.9 (B) NMAC ☒, if applicable.**<br>Signature: Pam Stevens | OIL CONSERVATION DIVISION<br>Approved By: [signature] |
|---|---|
| Printed name: Pam Stevens | Title: Dist II Supervisor |
| Title: Regulatory Analyst | Approved Date: 3/25/2015 Expiration Date: 3/25/2017 |
| E-mail Address: pstevens@bcoperating.com | |
| Date: 03/25/2015 Phone: 432-684-9696 | Conditions of Approval Attached |

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State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

NM OIL CONSERVATION
ARTESIA DISTRICT
MAR 05 2015
RECEIVED

Form C-102
Revised August 1, 2011
Submit one copy to appropriate District Office
☐ AMENDED REPORT

# WELL LOCATION AND ACREAGE DEDICATION PLAT

| [1] API Number | [2] Pool Code | [3] Pool Name |
|---|---|---|
| 30-015-42999 | 75460 | CROOKED CREEK; WOLFCAMP EAST (GAS) |

| [4] Property Code | [5] Property Name | [6] Well Number |
|---|---|---|
| 314340 | CAVEGIRL 31 STATE | 1H |

| [7] OGRID No. | [8] Operator Name | [9] Elevation |
|---|---|---|
| 160825 | B.C. OPERATING, INC. | 3843' |

## [10] Surface Location

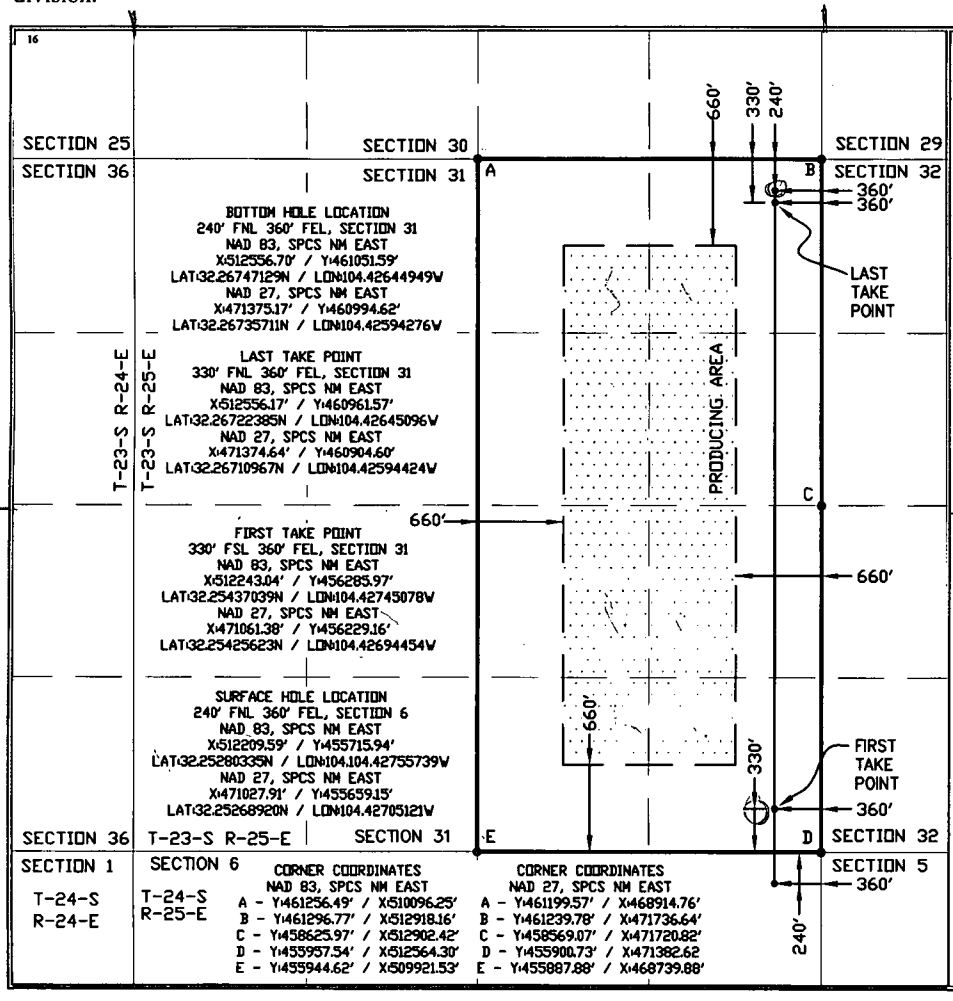
| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---|---|---|---|---|---|---|---|---|---|
| A | 6 | T24S | R25E | | 240' | NORTH | 360' | EAST | EDDY |

## [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 |
|---|---|---|---|---|---|---|---|---|---|
| A | 31 | T23S | R25E | | 240' | NORTH | 360' | EAST | EDDY |

| [12] Dedicated Acres | [13] Joint or Infill | [14] Consolidation Code | [15] Order No. |
|---|---|---|---|
| 320.00 | | | |

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.




## [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 unleased 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.*

Pam Stevens 3/1/15
Signature Date

Pam Stevens
Printed Name

pstevens@bcoperating.com
E-mail Address

## [18] SURVEYOR CERTIFICATION

*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.*

JANUARY 20, 2015
Date of Survey

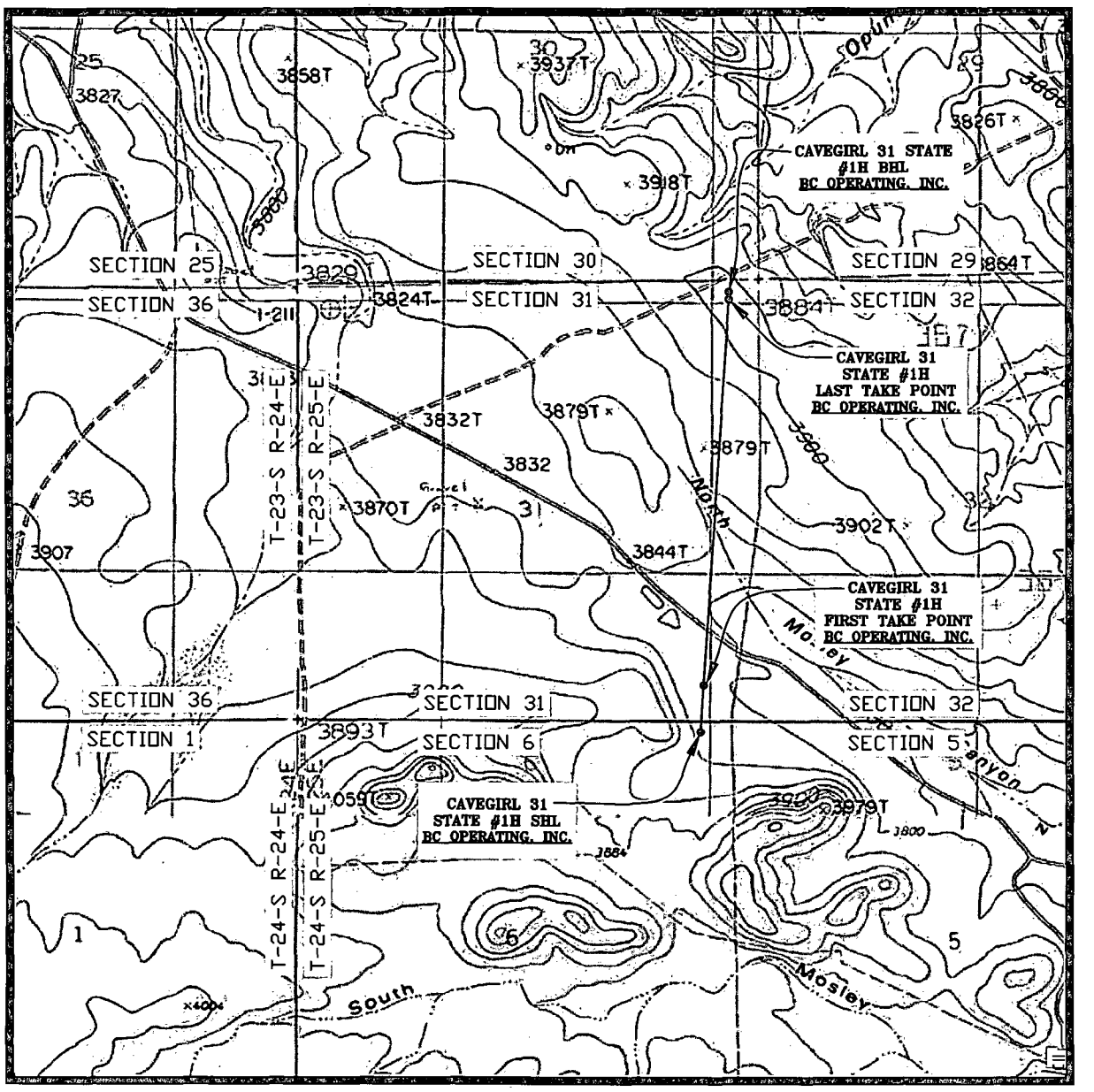
Signature and Seal of Professional Surveyor:

LLOYD P. SHORT NEW MEXICO 21653 PROFESSIONAL SURVEYOR

Lloyd P. Short

Certificate Number LLOYD P. SHORT 21653

# LOCATION VERIFICATION MAP

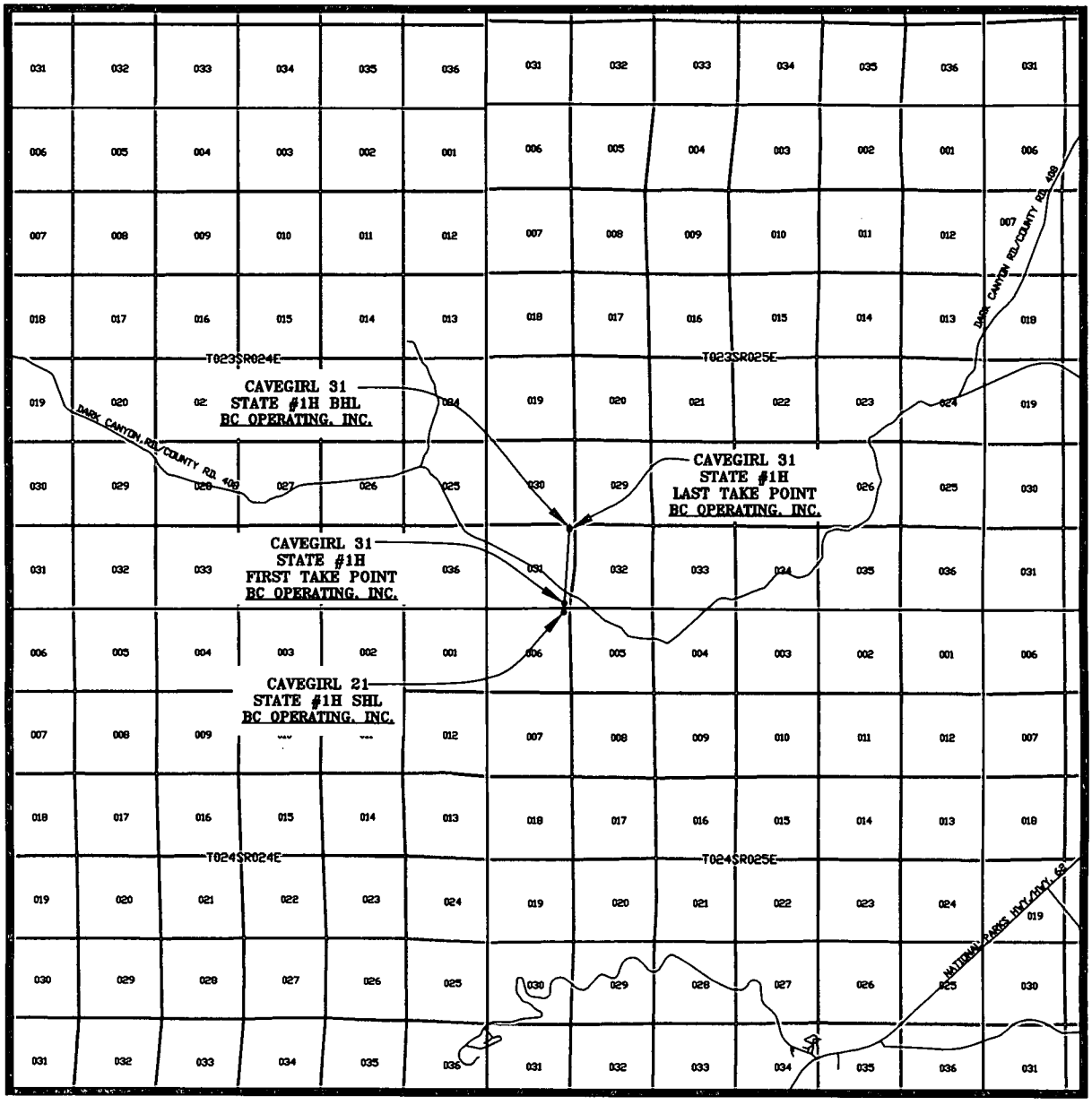



SEC. 6 TWP. 24-S RGE. 25-E
SURVEY: N.M.P.M.
COUNTY: EDDY
DESCRIPTION: 240' FNL & 360' FEL
ELEVATION: 3843'
OPERATOR: B.C. OPERATING, INC.
LEASE: CAVEGIRL 31 STATE
U.S.G.S. TOPOGRAPHIC MAP: CARNERO PEAK, N.M.

SCALE: 1" = 2000'
CONTOUR INTERVAL = 10'


PREPARED BY:
R-SQUARED GLOBAL, LLC
1309 LOUISVILLE AVENUE, MONROE, LA 71201
318-323-6900 OFFICE
JOB No. R3477_001

# VICINITY MAP




SEC. 6 TWP. 24-S RGE. 25-E
SURVEY: N.M.P.M.
COUNTY: EDDY
DESCRIPTION: 240' FNL & 360' FEL
ELEVATION: 3843'
OPERATOR: B.C. OPERATING, INC.
LEASE: CAVEGIRL 31 STATE
U.S.G.S. TOPOGRAPHIC MAP: CARNERO PEAK, N.M.

SCALE: 1" = 2 MILES


PREPARED BY:
R-SQUARED GLOBAL, LLC
1309 LOUISVILLE AVENUE, MONROE, LA 71201
318-323-6900 OFFICE
JOB No. R3477_001

# BC Operating, Inc. Closed Loop System

**Design Plan**

*Equipment List*

- 2 – 414 MI Swaco *Centrifuges*
- 2 – MI Swaco 4 screen Moongoose *Shale Shakers*
- 2 – double screen *Shakers* with rig inventory
- 2 – CRI *Haul off bins* with track system
- 2 – additional 500bbl *Frac tanks* for fresh and brine water
- 2 – 500bbl *water tanks* with rig inventory

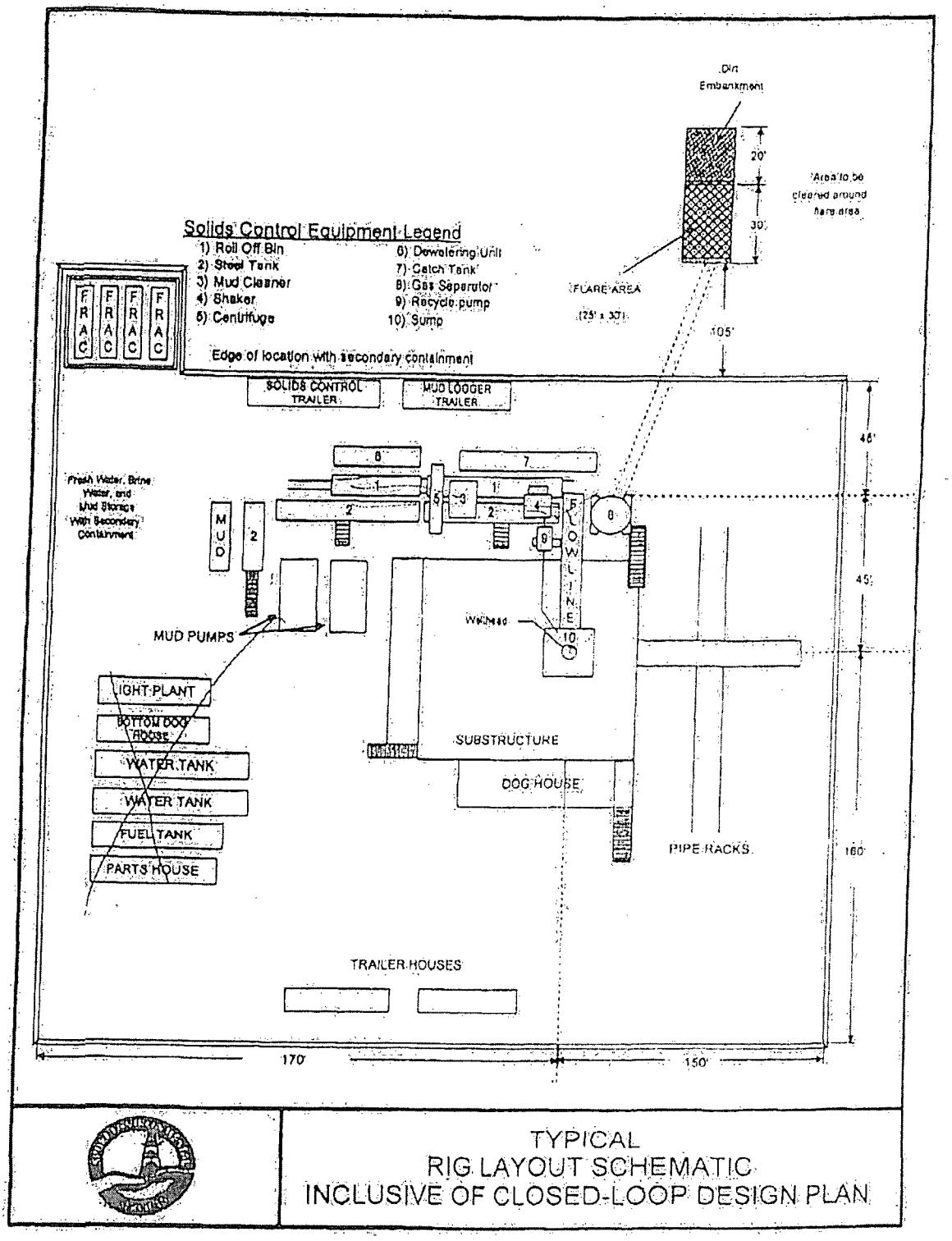
**Equipment manufactures may vary due to availability but components will not.*

**Operation and Maintenance**

The system along with equipment will be inspected numerous times a day by each tour to make sure all equipment is operating correctly. Routine maintenance will be done to keep system running properly. Any leak in system will be repaired and/or contained immediately and the OCD notified within 48 hours of the remediation process start.

**Closure Plan**

While drilling, all cuttings and fluids associated with drilling will be hauled off and disposed of via Controlled Recovery Incorporated Facilities Permit NM01-0006.




TYPICAL
RIG LAYOUT SCHEMATIC
INCLUSIVE OF CLOSED-LOOP DESIGN PLAN

# Permit Conditions of Approval

API: 30-015-42999 Cavegirl 31 State #1H

| OCD Reviewer | Condition |
|---|---|
| RDADE | Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string |