District I
1625 N French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

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

FEB 11 2009

Form C-144 CLEZ
July 21, 2008

**For closed-loop systems *that only use above ground steel tanks or haul-off bins and propose to implement waste removal for closure*,** submit to the appropriate NMOCD District Office.

# Closed-Loop System Permit or Closure Plan Application

*(that only use above ground steel tanks or haul-off bins and propose to implement waste removal for closure)*

Type of action: ☐ Permit ☒ Closure **Originally Permitted under Rule 50**

***Instructions: Please submit one application (Form C-144 CLEZ) per individual closed-loop system request. For any application request other than for a closed-loop system that only use above ground steel tanks or haul-off bins and propose to implement waste removal for closure, please submit a Form C-144.***

Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.

1.
Operator: **COG Operating LLC** OGRID #: **229137**
Address: **550 West Texas Ave, Suite 1300, Midland, TX 79701**
Facility or well name: **State S-19 #21**
API Number: **30-015-32062** OCD Permit Number: **Originally Permitted under Rule 50**
U/L or Qtr/Qtr **UL P** Section **19** Township **17S** Range **29E** County: **EDDY**
Center of Proposed Design: Latitude _____ Longitude _____ NAD: ☐1927 ☐ 1983
Surface Owner: ☐ Federal ☒ State ☐ Private ☐ Tribal Trust or Indian Allotment

2.
☒ **Closed-loop System:** Subsection H of 19.15.17.11 NMAC
Operation: ☐ Drilling a new well ☒ Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent) ☐ P&A
☐ Above Ground Steel Tanks or ☒ Haul-off Bins

3.
**Signs:** Subsection C of 19.15.17.11 NMAC
☐ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers
☒ Signed in compliance with 19.15.3.103 NMAC

4.
**Closed-loop Systems Permit Application Attachment Checklist:** Subsection B of 19.15.17.9 NMAC
***Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.***
☐ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
☐ Closure Plan (Please complete Box 5) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC
☐ Previously Approved Design (attach copy of design) API Number: _____
☐ Previously Approved Operating and Maintenance Plan API Number: _____

5.
**Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only:** (19.15.17.13.D NMAC)
***Instructions: Please indentify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if more than two facilities are required.***
Disposal Facility Name: _____ Disposal Facility Permit Number: _____
Disposal Facility Name: _____ Disposal Facility Permit Number: _____
Will any of the proposed closed-loop system operations and associated activities occur on or in areas that *will not* be used for future service and operations?
☐ Yes (If yes, please provide the information below) ☒ No
*Required for impacted areas which will not be used for future service and operations:*
☐ Soil Backfill and Cover Design Specifications - - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC
☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

ENTERED

6.
**Operator Application Certification:**

I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief.

Name (Print): _____ Title: _____

Signature: _____ Date: _____

e-mail address: _____ Telephone: _____

7.
**OCD Approval:** ☐ Permit Application (including closure plan) ☐ Closure Plan (only)

**OCD Representative Signature:** _____ **Approval Date:** _____

**Title:** _____ **OCD Permit Number:** _____

8.
**Closure Report (required within 60 days of closure completion):** Subsection K of 19.15.17.13 NMAC

***Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report. The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed.***

☐ **Closure Completion Date:** 10/29/08

9.
**Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only:**

***Instructions: Please indentify the facility or facilities for where the liquids, drilling fluids and drill cuttings were disposed. Use attachment if more than two facilities were utilized.***

Disposal Facility Name: CRI Disposal Facility Permit Number: R 1966

Disposal Facility Name: GM INC Disposal Facility Permit Number: 711-019-001

Were the closed-loop system operations and associated activities performed on or in areas that *will not* be used for future service and operations?

☐ Yes (If yes, please demonstrate compliance to the items below) ☒ No

*Required for impacted areas which will not be used for future service and operations:*

☐ Site Reclamation (Photo Documentation)
☐ Soil Backfilling and Cover Installation
☐ Re-vegetation Application Rates and Seeding Technique

10.
**Operator Closure Certification:**

I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.

Name (Print): Phyllis A. Edwards Title: Regulatory Analyst

Signature: Phyllis A. Edwards Date: 1/27/09

e-mail address: pedwards@conchoresources.com Telephone: 432-685-4340

Scientific Drilling

**COG RESOURCES**

Field: Empire Yeso
Site: Eddy County, NM
Well: State S 19 #21
Wellpath: VH - Job #32K1008789
Survey: 10/08/08

This survey is correct to the best of my knowledge and is supported by actual field data.

.....Company Representative

Notorized this date 6th of October, 2008.

Notary Signature
County of Midland
State of Texas

NOTARY PUBLIC STATE OF TEXAS
CARRIE REED
My Commission Expires
October 4, 2011

Scientific Drilling

# Scientific Drilling International
## Survey Report

| | | | | | |
|---|---|---|---|---|---|
| **Company:** | COG RESOURCES | **Date:** 10/29/2008 | **Time:** 16:33:47 | **Page:** | 1 |
| **Field:** | Empire Yeso | **Co-ordinate(NE) Reference:** | Site: Eddy County, NM, True North | | |
| **Site:** | Eddy County, NM | **Vertical (TVD) Reference:** | SITE 0.0 | | |
| **Well:** | State S 19 #21 | **Section (VS) Reference:** | Well (0.00N,0.00E,28.12Azi) | | |
| **Wellpath:** | VH - Job #32K1008789 | **Survey Calculation Method:** | Minimum Curvature | **Db:** | Sybase |

| | | | |
|---|---|---|---|
| **Survey:** | 10/08/08<br>KSRG 0'-5390' | **Start Date:** | 10/08/2008 |
| **Company:** | Scientific Drilling Internatio | **Engineer:** | Melendez w/Halliburton |
| **Tool:** | MWD;MWD | **Tied-to:** | From Surface |

**Survey**

| MD<br>ft | Incl<br>deg | Azim<br>deg | TVD<br>ft | VS<br>ft | N/S<br>ft | E/W<br>ft | DLS<br>deg/100ft | ClsD<br>ft | ClsA<br>deg |
|---|---|---|---|---|---|---|---|---|---|
| 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 100.00 | 0.24 | 334.60 | 100.00 | 0.12 | 0.19 | -0.09 | 0.24 | 0.21 | 334.60 |
| 200.00 | 0.07 | 120.65 | 200.00 | 0.25 | 0.35 | -0.13 | 0.30 | 0.37 | 339.89 |
| 300.00 | 0.06 | 25.21 | 300.00 | 0.30 | 0.36 | -0.05 | 0.10 | 0.37 | 351.82 |
| 400.00 | 0.49 | 66.29 | 400.00 | 0.68 | 0.58 | 0.36 | 0.45 | 0.69 | 31.81 |
| 500.00 | 0.63 | 75.74 | 499.99 | 1.39 | 0.89 | 1.29 | 0.17 | 1.56 | 55.31 |
| 600.00 | 0.50 | 56.22 | 599.99 | 2.15 | 1.27 | 2.18 | 0.23 | 2.52 | 59.83 |
| 700.00 | 0.62 | 56.87 | 699.98 | 3.01 | 1.81 | 3.00 | 0.12 | 3.50 | 58.92 |
| 800.00 | 0.61 | 57.48 | 799.98 | 3.94 | 2.39 | 3.90 | 0.01 | 4.57 | 58.51 |
| 900.00 | 0.29 | 31.71 | 899.97 | 4.66 | 2.89 | 4.48 | 0.37 | 5.33 | 57.18 |
| 1000.00 | 0.27 | 2.98 | 999.97 | 5.13 | 3.34 | 4.63 | 0.14 | 5.71 | 54.17 |
| 1100.00 | 0.28 | 335.15 | 1099.97 | 5.49 | 3.80 | 4.54 | 0.13 | 5.92 | 50.06 |
| 1200.00 | 0.28 | 335.92 | 1199.97 | 5.78 | 4.24 | 4.33 | 0.00 | 6.06 | 45.61 |
| 1300.00 | 0.12 | 319.66 | 1299.97 | 5.97 | 4.55 | 4.17 | 0.17 | 6.17 | 42.51 |
| 1400.00 | 0.24 | 265.35 | 1399.97 | 5.90 | 4.61 | 3.89 | 0.20 | 6.03 | 40.17 |
| 1500.00 | 0.33 | 298.14 | 1499.97 | 5.78 | 4.73 | 3.43 | 0.18 | 5.84 | 35.94 |
| 1600.00 | 0.37 | 305.26 | 1599.97 | 5.82 | 5.05 | 2.91 | 0.06 | 5.83 | 29.95 |
| 1700.00 | 0.31 | 295.61 | 1699.97 | 5.85 | 5.35 | 2.40 | 0.08 | 5.87 | 24.16 |
| 1800.00 | 0.37 | 275.20 | 1799.96 | 5.71 | 5.50 | 1.84 | 0.13 | 5.80 | 18.46 |
| 1900.00 | 0.40 | 269.23 | 1899.96 | 5.42 | 5.52 | 1.17 | 0.05 | 5.64 | 11.91 |
| 2000.00 | 0.36 | 281.12 | 1999.96 | 5.16 | 5.58 | 0.51 | 0.09 | 5.60 | 5.20 |
| 2100.00 | 0.19 | 286.97 | 2099.96 | 5.04 | 5.69 | 0.04 | 0.17 | 5.69 | 0.42 |
| 2200.00 | 0.22 | 323.37 | 2199.96 | 5.09 | 5.89 | -0.23 | 0.13 | 5.90 | 357.75 |
| 2300.00 | 0.24 | 296.34 | 2299.96 | 5.16 | 6.14 | -0.53 | 0.11 | 6.16 | 355.03 |
| 2400.00 | 0.22 | 301.94 | 2399.96 | 5.17 | 6.33 | -0.88 | 0.03 | 6.39 | 352.05 |
| 2500.00 | 0.23 | 219.79 | 2499.96 | 4.98 | 6.28 | -1.18 | 0.30 | 6.39 | 349.39 |
| 2600.00 | 0.24 | 208.01 | 2599.95 | 4.58 | 5.94 | -1.40 | 0.05 | 6.10 | 346.71 |
| 2700.00 | 0.17 | 218.20 | 2699.95 | 4.22 | 5.64 | -1.59 | 0.08 | 5.86 | 344.22 |
| 2800.00 | 0.09 | 279.21 | 2799.95 | 4.05 | 5.53 | -1.76 | 0.15 | 5.81 | 342.34 |
| 2900.00 | 0.40 | 83.50 | 2899.95 | 4.22 | 5.59 | -1.49 | 0.49 | 5.78 | 345.04 |
| 3000.00 | 0.38 | 76.20 | 2999.95 | 4.64 | 5.71 | -0.82 | 0.05 | 5.76 | 351.78 |
| 3100.00 | 0.34 | 80.88 | 3099.95 | 5.04 | 5.83 | -0.21 | 0.05 | 5.84 | 357.95 |
| 3200.00 | 0.31 | 77.32 | 3199.95 | 5.40 | 5.94 | 0.35 | 0.04 | 5.95 | 3.35 |
| 3300.00 | 0.36 | 84.53 | 3299.95 | 5.75 | 6.03 | 0.92 | 0.07 | 6.10 | 8.72 |
| 3400.00 | 0.62 | 66.69 | 3399.94 | 6.35 | 6.27 | 1.73 | 0.30 | 6.51 | 15.46 |
| 3500.00 | 0.70 | 50.23 | 3499.94 | 7.34 | 6.88 | 2.70 | 0.20 | 7.39 | 21.44 |
| 3600.00 | 1.01 | 38.21 | 3599.92 | 8.77 | 7.96 | 3.72 | 0.36 | 8.78 | 25.02 |
| 3700.00 | 1.11 | 40.38 | 3699.91 | 10.59 | 9.39 | 4.89 | 0.11 | 10.59 | 27.50 |
| 3800.00 | 1.27 | 42.20 | 3799.89 | 12.61 | 10.95 | 6.26 | 0.16 | 12.61 | 29.76 |
| 3900.00 | 0.64 | 52.12 | 3899.87 | 14.19 | 12.11 | 7.44 | 0.65 | 14.22 | 31.58 |
| 4000.00 | 0.93 | 44.75 | 3999.86 | 15.48 | 13.03 | 8.46 | 0.31 | 15.54 | 32.98 |
| 4100.00 | 0.56 | 35.36 | 4099.85 | 16.74 | 14.01 | 9.31 | 0.39 | 16.82 | 33.61 |
| 4200.00 | 0.75 | 28.00 | 4199.85 | 17.88 | 14.98 | 9.90 | 0.21 | 17.96 | 33.46 |
| 4300.00 | 0.48 | 44.66 | 4299.84 | 18.94 | 15.86 | 10.50 | 0.32 | 19.02 | 33.52 |
| 4400.00 | 0.57 | 29.84 | 4399.84 | 19.84 | 16.59 | 11.04 | 0.16 | 19.93 | 33.66 |
| 4500.00 | 0.47 | 18.12 | 4499.83 | 20.74 | 17.41 | 11.42 | 0.15 | 20.82 | 33.26 |
| 4600.00 | 0.50 | 340.63 | 4599.83 | 21.44 | 18.21 | 11.40 | 0.31 | 21.49 | 32.05 |
| 4700.00 | 0.58 | 349.14 | 4699.82 | 22.12 | 19.12 | 11.16 | 0.11 | 22.14 | 30.28 |
| 4800.00 | 0.75 | 18.35 | 4799.82 | 23.16 | 20.24 | 11.27 | 0.37 | 23.17 | 29.12 |

Scientific Drilling

# Scientific Drilling International
## Survey Report

| | | | | | |
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| **Company:** | COG RESOURCES | **Date:** 10/29/2008 | **Time:** 16:33:47 | **Page:** | 2 |
| **Field:** | Empire Yeso | **Co-ordinate(NE) Reference:** | Site: Eddy County, NM, True North | | |
| **Site:** | Eddy County, NM | **Vertical (TVD) Reference:** | SITE 0.0 | | |
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| **Wellpath:** | VH - Job #32K1008789 | **Survey Calculation Method:** | Minimum Curvature | **Db:** | Sybase |

**Survey**

| MD ft | Incl deg | Azim deg | TVD ft | VS ft | N/S ft | E/W ft | DLS deg/100ft | ClsD ft | ClsA deg |
|---|---|---|---|---|---|---|---|---|---|
| 4900.00 | 0.95 | 17.12 | 4899.81 | 24.62 | 21.65 | 11.72 | 0.20 | 24.62 | 28.43 |
| 5000.00 | 0.98 | 24.48 | 4999.79 | 26.29 | 23.22 | 12.32 | 0.13 | 26.29 | 27.95 |
| 5100.00 | 0.83 | 24.50 | 5099.78 | 27.86 | 24.66 | 12.98 | 0.15 | 27.87 | 27.75 |
| 5200.00 | 0.60 | 17.84 | 5199.77 | 29.10 | 25.82 | 13.44 | 0.24 | 29.10 | 27.50 |
| 5300.00 | 0.78 | 38.04 | 5299.77 | 30.29 | 26.85 | 14.02 | 0.30 | 30.29 | 27.57 |
| 5390.00 | 0.97 | 42.26 | 5389.75 | 31.63 | 27.90 | 14.91 | 0.22 | 31.63 | 28.12 |

Scientific Drilling

Field: Empire Yeso
Site: Eddy County, NM
Well: State S 19 #21
Wellpath: VH - Job #32K1008789
Survey: 10/08/08