

FORM
2

Rev
12/05

State of Colorado
Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80205 Phone: (303) 894-2100 Fax: (303) 894-2109



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03/09/2012

PluggingBond SuretyID

20030041

APPLICATION FOR PERMIT TO:

1. ☒ Drill, ☐ Deepen, ☐ Re-enter, ☐ Recomplete and Operate

2. TYPE OF WELL

OIL ☒ GAS ☐ COALBED ☐ OTHER _____
SINGLE ZONE ☒ MULTIPLE ☐ COMMINGLE ☐

Refiling ☐

Sidetrack ☐

3. Name of Operator: ANADARKO E&P COMPANY LP

4. COGCC Operator Number: 2800

5. Address: PO BOX 173779

City: DENVER State: CO Zip: 80217

6. Contact Name: CINDY VUE Phone: (720)929-6832 Fax: (720)929-7832

Email: CINDY.VUE@ANADARKO.COM

7. Well Name: SUN EMPIRE Well Number: 17-31-1H

8. Unit Name (if appl): _____ Unit Number: _____

9. Proposed Total Measured Depth: 12382

WELL LOCATION INFORMATION

10. QtrQtr: NWNW Sec: 17 Twp: 3S Rng: 65W Meridian: 6

Latitude: 39.795375 Longitude: -104.695531

Footage at Surface: 1101 feet FNL 382 feet FWL

11. Field Name: WILDCAT Field Number: 99999

12. Ground Elevation: 5446 13. County: ADAMS

14. GPS Data:

Date of Measurement: 09/23/2011 PDOP Reading: 2.5 Instrument Operator's Name: CHRIS BOUB

15. If well is ☐ Directional ☒ Horizontal (highly deviated) **submit deviated drilling plan.**

Footage at Top of Prod Zone: FNL/FSL FEL/FWL Bottom Hole: FNL/FSL FEL/FWL
660 FNL 630 FWL 660 FNL 460 FEL
Sec: 17 Twp: 3S Rng: 65W Sec: 17 Twp: 3S Rng: 65W

16. Is location in a high density area? (Rule 603b)? ☐ Yes ☒ No

17. Distance to the nearest building, public road, above ground utility or railroad: 1070 ft

18. Distance to nearest property line: 382 ft 19. Distance to nearest well permitted/completed in the same formation(BHL): 1320 ft

20. LEASE, SPACING AND POOLING INFORMATION

Objective Formation(s)	Formation Code	Spacing Order Number(s)	Unit Acreage Assigned to Well	Unit Configuration (N/2, SE/4, etc.)
NIOBRARA	NBRR	535-89	640	ALL

21. Mineral Ownership: ☒ Fee ☐ State ☐ Federal ☐ Indian Lease #: _____

22. Surface Ownership: ☒ Fee ☐ State ☐ Federal ☐ Indian

23. Is the Surface Owner also the Mineral Owner? ☒ Yes ☐ No Surface Surety ID#: _____

23a. If 23 is Yes: Is the Surface Owner(s) signature on the lease? ☒ Yes ☐ No

23b. If 23 is No: ☐ Surface Owners Agreement Attached or ☐ \$25,000 Blanket Surface Bond ☐ \$2,000 Surface Bond ☐ \$5,000 Surface Bond

24. Using standard QtrQtr, Sec, Twp, Rng format enter entire mineral lease description upon which this proposed wellsite is located (attach separate sheet/map if you prefer):

SEE ATTACHED OIL AND GAS LEASES

25. Distance to Nearest Mineral Lease Line: 460 ft

26. Total Acres in Lease: 484

DRILLING PLANS AND PROCEDURES

27. Is H2S anticipated? ☐ Yes ☒ No If Yes, attach contingency plan.

28. Will salt sections be encountered during drilling? ☐ Yes ☒ No

29. Will salt (>15,000 ppm TDS CL) or oil based muds be used during drilling? ☐ Yes ☒ No

30. If questions 28 or 29 are yes, is this location in a sensitive area (Rule 901.e)? ☐ Yes ☒ No

31. Mud disposal: ☒ Offsite ☐ Onsite

If 28, 29, or 30 are "Yes" a pit permit may be required.

Method: ☐ Land Farming ☒ Land Spreading ☐ Disposal Facility Other: _____

Note: The use of an earthen pit for Recompletion fluids requires a pit permit (Rule 905b). If air/gas drilling, notify local fire officials.

Casing Type	Size of Hole	Size of Casing	Wt/Ft	Csg/Liner Top	Setting Depth	Sacks Cmt	Cmt Btm	Cmt Top
SURF	13+1/2	9+5/8	36	0	1,870	1,890	1,890	0
1ST	8+3/4	7	26	0	8,168	730	8,168	0
1ST LINER	6+1/8	4+1/2	11.6	7126	12,382			

32. BOP Equipment Type: ☒ Annular Preventer ☐ Double Ram ☒ Rotating Head ☐ None

33. Comments No conductor casing will be used. Anadarko acknowledges the presence of Rouse Jack, Mcvey #1 well and the following anti-collision measures(BMP) described will be taken to avoid collision.

34. Location ID: _____

35. Is this application in a Comprehensive Drilling Plan ? ☐ Yes ☐ No

36. Is this application part of submitted Oil and Gas Location Assessment ? ☒ Yes ☐ No

I hereby certify all statements made in this form are, to the best of my knowledge, true, correct, and complete.

Signed: _____ Print Name: CINDY VUE

Title: REGULATORY ANALYST II Date: 3/9/2012 Email: DJREGULATORY@ANADARK

Based on the information provided herein, this Application for Permit-to-Drill complies with COGCC Rules and applicable orders and is hereby approved.

COGCC Approved:  Director of COGCC Date: 4/6/2012

API NUMBER

05 001 09746 00

Permit Number: _____ Expiration Date: 4/5/2014

CONDITIONS OF APPROVAL, IF ANY:

All representations, stipulations and conditions of approval stated in the Form 2A for this location shall constitute representations, stipulations and conditions of approval for this Form 2 Permit-to-Drill and are enforceable to the same extent as all other representations, stipulations and conditions of approval stated in this Permit-to-Drill.

- 1) Note surface casing setting depth change from 1870' to 1890'. Increase cement coverage accordingly.
- 2) Submit Form 42 electronically to COGCC 48 hours prior to MIRU.
- 3) Comply with Rule 317.i and provide cement coverage from end of 7" casing to a minimum of 200' above Niobrara. Verify coverage with cement bond log.
- 4) Run and submit Directional Survey from TD to base of surface casing. The operator shall comply with Rule 321, and it shall be the operator's responsibility to ensure that the wellbore complies with setback requirements in commission orders or rules prior to producing the well.

Attachment Check List

Att Doc Num	Name
1771637	SURFACE CASING CHECK
400257264	FORM 2 SUBMITTED
400257267	PLAT
400257268	TOPO MAP
400257272	OTHER
400259965	OIL & GAS LEASE
400259969	30 DAY NOTICE LETTER
400260024	DEVIATED DRILLING PLAN
400260058	DIRECTIONAL DATA

Total Attach: 9 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	No LGD or public comment received; final review completed.	4/3/2012 8:23:32 AM
Permit	Added BMP for anti-collision.	3/13/2012 11:21:49 AM
Permit	On hold - Planned lateral passes within 65 feet of deep dry hole. Anadarko must acknowledge its presence and briefly describe how they will avoid collision.	3/12/2012 6:50:25 AM
Permit	Operator corrected directional data. This form has passed completeness.	3/9/2012 1:28:42 PM
Permit	Returned to draft. Error in directional data.	3/9/2012 12:35:44 PM

Total: 5 comment(s)

BMP

<u>Type</u>	<u>Comment</u>
Drilling/Completion Operations	<p>Anti-Collision BMP</p> <p>"Prior to drilling operations, Operator may perform an anti-collision review of existing offset wells that have the potential of being within close proximity of the proposed well. This anti-collision review may include MWD or gyro surveys and surface locations of the offset wells with included error of uncertainty per survey instrument, and compared against the proposed wellpath with its respective error of uncertainty. If current surveys do not exist for the offset wells, Operator may have gyro surveys conducted to verify bottomhole location. The proposed well may only be drilled if the anti-collision review results indicate that the risk of collision is sufficiently low as defined by the anti-collision plan, with separation factors greater than 1.5, or if the risk of collision has been mitigated through other means including shutting in wells, plugging wells, increased drilling fluid in the event of lost returns or as is appropriate for the specific situation. In the event of an increased risk of collision, that risk will be mitigated to prevent harm to people, the environment or property. For the proposed well, upon conclusion of drilling operations, an as-constructed directional survey will be submitted to COGCC with the Form 5. "</p>

Total: 1 comment(s)