

FORM

2

Rev  
12/05

## State of Colorado

## Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203 Phone: (303) 894-2100 Fax: (303) 894-2109



Document Number:

400421821

Date Received:

06/17/2013

PluggingBond SuretyID

20100117

## 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: SUNDANCE ENERGY INC4. COGCC Operator Number: 103405. Address: 633 17TH STREET #1950City: DENVER State: CO Zip: 802026. Contact Name: Jeff Reale Phone: (970)663-1448 Fax: (970)667-0046Email: jeff@mistymountainop.com7. Well Name: Grant Brothers Well Number: 23-43

8. Unit Name (if appl): \_\_\_\_\_ Unit Number: \_\_\_\_\_

9. Proposed Total Measured Depth: 7699

## WELL LOCATION INFORMATION

10. QtrQtr: SWSE Sec: 23 Twp: 2N Rng: 68W Meridian: 6Latitude: 40.118634 Longitude: -104.967851

Footage at Surface: 628 feet FNL/FSL 1935 feet FEL/FWL FEL

11. Field Name: Spindle Field Number: 7790012. Ground Elevation: 4920 13. County: WELD

## 14. GPS Data:

Date of Measurement: 05/13/2013 PDOP Reading: 1.9 Instrument Operator's Name: JDP15. If well is ☒ Directional ☐ Horizontal (highly deviated) **submit deviated drilling plan.**

Footage at Top of Prod Zone: FNL/FSL 1985 FSL 661 FEL FEL Bottom Hole: FNL/FSL 1985 FSL 661 FEL FEL  
 Sec: 23 Twp: 2N Rng: 68W Sec: 23 Twp: 2N Rng: 68W

16. Is location in a high density area? (Rule 603b)? ☒ Yes ☐ No17. Distance to the nearest building, public road, above ground utility or railroad: 237 ft18. Distance to nearest property line: 628 ft 19. Distance to nearest well permitted/completed in the same formation(BHL): 662 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-CODELL	NB-CD	407-87	80	E/2SE/4

21. Mineral Ownership: ☒ Fee ☐ State ☐ Federal ☐ Indian Lease #: \_\_\_\_\_22. Surface Ownership: ☒ Fee ☐ State ☐ Federal ☐ Indian23. 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 ☐ No23b. 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):

SE/4 of Section 23, T2N, R68W

25. Distance to Nearest Mineral Lease Line: 661 ft

26. Total Acres in Lease: 160

### 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	12+1/4	8+5/8	24	0	800	430	800	0
1ST	7+7/8	4+1/2	11.6	0	7,699	580	7,699	3,000

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

33. Comments No conductor casing will be set.

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: Jeff Reale

Title: Agent Date: 6/17/2013 Email: jeff@mistymountainop.com

Operator must have a valid water right or permit allowing for industrial use or purchased water from a seller that has a valid water right or permit allowing for industrial use, otherwise an application for a change in type of use is required under Colorado law. Operator must also use the water in the location set forth in the water right decree or well permit, otherwise an application for a change in place of use is required under Colorado law. Section 37-92-103(5), C.R.S. (2011).

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: Matthew Lee Director of COGCC Date: 7/23/2013

#### API NUMBER

05 123 37753 00

Permit Number: \_\_\_\_\_ Expiration Date: 7/22/2015

#### 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 650' to 800'. Increase cement coverage accordingly and cement to surface.
- 2) Submit Form 42 electronically to COGCC 48 hours prior to MIRU.
- 3) Comply with Rule 317.i and provide cement coverage from TD to a minimum of 200' above Niobrara and from 200' below Shannon to 200' above Sussex. Verify coverage with cement bond log.
- 4) Comply with Rule 321. Run and submit Directional Survey from TD to base of surface casing. Ensure that the wellbore complies with setback requirements in commission orders or rules prior to producing the well.

### **Applicable Policies and Notices to Operators**

Notice Concerning Operating Requirements for Wildlife Protection.

### **Attachment Check List**

Att Doc Num	Name
1695728	EXCEPTION LOC REQUEST
400421821	FORM 2 SUBMITTED
400430615	TOPO MAP
400434980	SURFACE AGRMT/SURETY
400438473	WELL LOCATION PLAT
400438474	MULTI-WELL PLAN
400438479	DIRECTIONAL DATA
400438481	DEVIATED DRILLING PLAN

Total Attach: 8 Files

### **General Comments**

<b><u>User Group</u></b>	<b><u>Comment</u></b>	<b><u>Comment Date</u></b>
Permit	Final Review Completed. LGD comment addressed (see BMP's on form 2A); no public comment received.	7/22/2013 10:10:05 AM
Permit	Attached request for exception to twinning letter. ok to pass.	6/28/2013 1:37:58 PM
Permit	Operator requests approval of a Rule 318Ac exception location: Wellhead is to be located more than 50' from an existing well location. Request and waiver attached.	6/28/2013 1:37:51 PM

LGD	<p>From: Christopher Kennedy</p> <p>To: Meghan Martinez</p> <p>Cc: Jennifer Simmons</p> <p>Subject: Phone Call RE: Sundance Wells in Eagle Valley</p> <p>Date: Thursday, June 06, 2013 5:25:00 PM</p> <p>Meghan,</p> <p>Is it too late to get this in the Board packet?</p> <hr/> <p>Public comment to be included in the Board packet for the 6-11-13 meeting:</p> <p>6/6/2013</p> <p>I just spoke with Jean Martin, who lives in Raspberry Hill and is very concerned about the potential</p> <p>for drilling in her neighborhood. She was in attendance at the neighborhood meeting held on May</p> <p>22 and the Board meeting on May 28 and spoke out against the proposed wells. She submitted</p> <p>written comments via email for inclusion in the Board packet for the 6-11-13 meeting, but wanted</p> <p>to speak with me in person to let me know that she will be out of town for a funeral and will not be</p> <p>able to attend that meeting after all. She also informed me that Ricky Pickett, another resident in</p> <p>the area will be unable to attend, and that there are many other residents in the area that are just</p> <p>now getting up to speed on this issue and becoming concerned. She believes that the proposal is</p> <p>moving too fast, and is requesting that the Board table the item until a later date when more people</p> <p>can attend and speak.</p> <p>Christopher A. Kennedy, AICP</p> <p>Planner III</p> <p>direct: 720-382-5652</p> <p>ckennedy@frederickco.gov</p>	<p>6/26/2013 1:38:04 PM</p>
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LGD	<p>From: jean martin</p> <p>To: Christopher Kennedy</p> <p>Subject: Proposed Eagle Valley Well and Fracking</p> <p>Date: Thursday, June 06, 2013 4:56:47 PM</p> <p>Dear Mr. Kennedy:</p> <p>My name is Jean Martin, a homeowner in Raspberry Hill. Our property backs to the proposed</p> <p>Eagle Valley well and fracking project. We met at the meeting on May 22nd and May28th.</p> <p>As you know I am very concerned about hydralulic fracturing occuring so slose to two</p> <p>neighborhoods and a school. There are many health concerns related to fracking occuring</p> <p>so close to dwellings.</p> <p>There will be round the clock noise for the 3 weeks while they are drilling, stadium lighting</p> <p>and excessive truck traffic on a street where residents are coming and going and children are</p> <p>walking to school.</p> <p>This is more than an annoyance, it is a hazard. It just doenst seem fair to the residents of</p> <p>theses neighborhoods.</p> <p>I truly hope that a more reasonable site can be found for this project. Unfortunately I will</p> <p>not be able to attend the meeting scheduled for June 11th, so I wanted to voice my concern</p> <p>with you.</p> <p>Thank you for your service to the citizens of the Town of Frederick.</p> <p>Best Regards,</p> <p>Jean Martin</p>	<p>6/26/2013 1:37:29 PM</p>
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LGD	<p>May 27, 2013</p> <p>Dear Chris,</p> <p>Thank you for providing a meeting time to understand the plans for drilling in our neighborhood. It was informative and I better understand the process.</p> <p>I do not know what is involved in the permitting/planning process with the town of Frederick, but I am hoping that the highest possible standards will be established and followed by Sundance.</p> <p>The following are concerns:</p> <p>? Safety</p> <p>Walking in and around the neighborhood and to the school.</p> <p>? Increased road traffic on Godding Hollow and in the neighborhood.</p> <p>Is it possible to change the speed limit on Godding Hollow to a more neighborhood friendly speed limit? Currently it is at 45 and traffic moves much faster. Maybe a stop sign at the school crosswalk would help with that so it becomes less of a fast route to the frontage road and lead to more of a neighborhood friendly pace.</p> <p>? Environmental safety</p> <p>It sounds safe, but what recourse do we have if there is a problem and it affects the homes in the neighborhood?</p> <p>? Noise levels</p> <p>During the actual drilling and after completion</p> <p>Time the drilling before children return to school, or next summer.</p> <p>? Road Maintenance</p> <p>Godding Hollow and all neighborhood streets affected.</p> <p>? Collection times</p> <p>Consider school hours. Collection only during business hours and not on weekends/holidays.</p> <p>? Landscaping</p> <p>Please establish the highest standards possible for the community. It will establish a precedent for those who will or will not want to be a part of this community as it grows.</p> <p>Thank you,</p> <p>Rene' Goddard</p>	6/26/2013 1:36:51 PM
LGD	<p>From: johnscar@comcast.net</p> <p>To: Christopher Kennedy</p> <p>Subject: Re: Sundance and Eagle Valley Neighborhood Concerns</p> <p>Date: Thursday, May 30, 2013 5:34:16 AM</p>	6/26/2013 1:36:11 PM

John Goddard, 4796 Falcon Drive, What can we do to work on this?

From: Christopher Kennedy

To: johnscar@comcast.net

Sent: Tuesday, May 28, 2013 8:31:44 AM

Subject: RE: Sundance and Eagle Valley Neighborhood Concerns

Thanks for your comments! What was your name?

Christopher A. Kennedy, AICP

Planner III

direct: 720-382-5652

ckennedy@frederickco.gov

Town of Frederick

Planning Department

401 Locust St., PO Box 45

Frederick, CO 80530

main: 720-382-5650, fax: 720-382-5520

www.frederickco.gov

From: johnscar@comcast.net [mailto:johnscar@comcast.net]

Sent: Monday, May 27, 2013 8:32 AM

To: Christopher Kennedy

Subject: Sundance and Eagle Valley Neighborhood Concerns

Hi! I'm writing about my concerns about our neighborhood and the effects of the new gas well. My biggest concern and I think everyone's should be the traffic, with large trucks in and out of the neighborhood and the high speed limit on Godding Hollow. I understand we can't stop the traffic, but for the safety of our children and to reduce the noise, we can lower the speed limit on Godding Hollow to 25 miles an hour. This is a family neighborhood and the safety of our children should be a priority. Lowering the speed limit will help lower the effects of this well more than any other thing we can do, PLEASE do all you can to accomplish this and make it a priority.

	<p>Other concern; Smells, Access to the Neighborhood, Road maintenance, I would like to see limited hours for the trucks to access the well.</p> <p>I very strongly feel that we must find a way to lower the speed limit on Godding Hollow. We will be very limited in what we can do to improve this situation and preserve the Safety of our Children, Property values, Noise Levels, and Road Maintenance, I feel this one thing will show the largest improvement in all the above areas of concern.</p> <p>Please call me if I can help in any way, 720-491-3655.</p>		
LGD	<p>From: rickypick@juno.com</p> <p>To: Christopher Kennedy</p> <p>Subject: Fw: drilling in Eagle Valley</p> <p>Date: Saturday, June 01, 2013 9:57:04 PM</p> <p>Chris,</p> <p>I wasnt sure who to send my comments to, so please let me know who needs to hear what Eagle Valley homeowners think about the proposal from Sundance Energy.</p> <p>My personal thoughts are:</p> <ul style="list-style-type: none"> <li>- The drilling is too close to homes, our park, Legacy Elementary, and childrens playgrounds..</li> <li>- It will add to the already too busy and congested intersection of Eagle Blvd. and Godding Hollow. This is the only entrance and exit to Legacy Elementary. SAFETY is already an issue, and it will be much more dangerous with the added trucks and equipment.</li> <li>- The roads were built for neighborhood traffic, not heavy oil tankers. They will cause excessive damage and greater wear and tear on our streets.</li> <li>- The greatest impact will be felt by the homeowners on Eagle Blvd. right across the street from the activity. It will take away the beautiful, peaceful view they expected to always have because that area was supposed to be a drainage area. They will have to look at ugly, industrial equipment and endure months of round the clock noise, lights, smells, vibrations, traffic, etc. Their property values will drop significantly, and their homes will be hard to sell if they want to move.</li> </ul>	6/26/2013 1:35:07 PM	



	<p>- This will destroy the appearance of the main entrance to Eagle Valley. It will look like you are driving into an oil refinery instead of a well maintained, upper class neighborhood. It will have a huge negative impact on the quality of life in our community, and property values.</p> <p>- I dont know anything about the fracking, but so many people are finding serious problems it has caused in other areas where it has been done. Im not convinced we wont have problems too.</p> <p>If we have to have storage tanks that are 10 high, can they put them 5 or 6 below grade? The 4 or 5 above ground level would be much easier to deal with.</p> <p>I really hope there will be other possible places for them to drill which will not impact us so intensely. I do believe we have a good Mayor and Trustees in Frederick now who really care about the people. Many homeowners have said they didnt think it would do any good to come to meetings and give their input because it didnt do any good in past years. Please fight for us, the citizens you represent, and dont allow Sundance to drill in Eagle Valley.</p> <p>If it is possible to postpone the discussion on this issue until the next regular Town Board Meeting, please do. I will be out of town on June 11th, as will a few other interested homeowners. You can reach me at 303-485-1903 or rickypick@juno.com.</p> <p>Thank-you,</p> <p>Ricky Pickett</p> <p>4859 Barn Owl Drive</p> <p>Frederick, CO 80504</p>		
LGD	<p>From: C McElwaine</p> <p>To: Board of Trustees</p> <p>Cc: Jennifer Simmons; Christopher Kennedy</p> <p>Subject: Sundance Energy</p> <p>Date: Tuesday, June 04, 2013 5:52:50 PM</p> <p>To members of our City Council (and Administration),</p> <p>This letter is regarding Sundance Energys proposal to drill, and add storage tanks. I did</p>	6/26/2013 1:34:29 PM	

attend the meeting at the Council office, and have given it some thought. While I realize the

drilling noise and activity is temporary, my concern is with the PERMANENT storage tanks and

apparatus.

There is a single tank located South of Road 18 on Road 11, and I believe that will be the size

of each tank. Multiply that by several, and that is too massive in size for the residents of

Eagle Valley to view for the rest of our residency here. The noise of the continuing operation

of large trucks will remain after the drilling has been abandoned. I do not live directly across

from the site, but I do drive or walk past it almost daily. The view of the mountains and open

space that we thought would always be there, will be forever obstructed. Our peaceful walks

will no longer be silent and nice, and the air may have the scent of industry and diesel.

If the operation cannot be dissected to allow the drilling without the tanks, I urge you to vote

against it. There has to be other choices for Sundance. (One other thing; if possible, could

you delay the decision for a short time, because so many residents have no idea because they

did not receive the informative letter about the meeting, and it would give us time to let

them know, so that they can let you know their thoughts...?)

Thank you for listening.

Sincerely,

Charleen McElwaine

4822 Thrush Ct, Frederick

LGD	<p>the flood plain boundary being near by. Is there any flexibility in locating those tanks? Since there are so many kids that walk to school on the sidewalk on the West side of Eagle Blvd we wanted to make sure they would be safe, too.</p> <p>It was brought up that there will be increased traffic on Eagle Blvd due to trucks going to and from the well site.</p> <p>We discussed the amount of noise that would be generated during the actual drilling. The Sundance reps told us that hay bales would be stacked about 12 feet high around the site to muffle the noise. Apparently the engine that powers the drilling is mounted high up on the derrick. We aren't sure if 12 feet is high enough.</p> <p>The drilling derrick is 100 ft tall, so when it arrives at the site, it will have to enter from Eagle Blvd and cross over the sidewalk to get to its final location. The Sundance reps said there would be dirt on the sidewalk to help smooth out the bumps of the curb and the edges of the sidewalk. It wasn't clear if the weight of the derrick would damage the sidewalk and if so it would need to be repaired. I imagine the grass between the sidewalk and the street would be damaged as well. Can the derrick fit between the trees?</p> <p>We discussed fracking. Fracking will be used in the well, but it sounds like the holes for the wells will be lined with concrete and shouldn't get into the aquifer. It doesn't sound like there will be any danger of pollution from the fracking fluid. Does the Town agree?</p> <p>Once the drilling is complete and work at the site is complete what will be done to make the area a little nicer to look at? The Sundance reps said that some landscaping and wrought iron fencing would be put in and that it would conform to the guidelines set by the town of Frederick.</p> <p>Carol Johnson</p> <p>4805 Eagle Blvd</p> <p>303-774-7813</p>	6/26/2013 1:33:40 PM
Permit	Per operator changed lat/longs to 40.118634/-104.967851 per operator, Added doc #400421904 to the related forms tab, Change the spacing from N/2SE/4 to E/2SE/4, changed Density to High. ON HOLD: w/o Exception to Twinning Request letter and waiver.	6/26/2013 12:46:26 PM
Permit	ON HOLD: Requesting confirmation of the lat/longs for this well. Don't match the current WLP. The Exception to Twinning Request letter and waiver. Change the spacing from N/2SE/4 to E/2SE/4. Complete the Related Forms tab. Change density to High.	6/26/2013 10:05:52 AM
Permit	Changed distance to nearest road from 355' to 237' per operator.	6/26/2013 9:33:22 AM
Permit	Form passes completeness.	6/25/2013 11:01:28 AM
Permit	Returned to draft: Well in High Density area. Building @ 30'.	6/18/2013 3:04:38 PM

Total: 15 comment(s)

### **BMP**

<u>Type</u>	<u>Comment</u>