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Return Receipt Fee (Endorsement Required)	
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Total <b>Lynch, James</b>	
Sent <b>4588 CR 523</b>	
Street or PO	
City, State	
PS Form 3800, August 2006	
See Reverse for Instructions	

<b>SENDER: COMPLETE THIS SECTION</b>		<b>COMPLETE THIS SECTION ON DELIVERY</b>	
<ul style="list-style-type: none"><li>■ Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.</li><li>■ Print your name and address on the reverse so that we can return the card to you.</li><li>■ Attach this card to the back of the mailpiece, or on the front if space permits.</li></ul>		<b>A. Signature</b> <input checked="" type="checkbox"/> <i>[Signature]</i> <input type="checkbox"/> Agent <input checked="" type="checkbox"/> Addressee	
<b>1. Article Addressed to:</b>  Lynch, James 4588 CR 523 Bayfield, CO 81122		<b>B. Received by (Printed Name)</b> <i>James Lynch</i> <b>C. Date of Delivery</b> <i>8-26-14</i>	
		<b>D. Is delivery address different from item 1?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If YES, enter delivery address below:	
		<b>3. Service Type</b> <input checked="" type="checkbox"/> Certified Mail® <input type="checkbox"/> Priority Mail Express™ <input type="checkbox"/> Registered <input checked="" type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> Collect on Delivery	
		<b>4. Restricted Delivery? (Extra Fee)</b> <input type="checkbox"/> Yes	
<b>2. Article Number</b> (Transfer from service label)		7014 0510 0001 5802 8721	
PS Form 3811, July 2013		Domestic Return Receipt	



1801 Broadway, Suite 1000 P 720.484.2344  
Denver, Colorado 80202 F 720.484.2363

August 19, 2014

**SENT VIA CERTIFIED MAIL # 70140510000158028721**

Lynch, James  
4588 CR 523  
Bayfield CO 81122

**RE: Oil and Gas Location Assessment Notice**

Lynch 34-6-18 #1 ("Well")  
Surface Location: 1735'FNL 211'FWL  
Bottom Hole Location: 1980' FNL 820' FWL

Lynch 34-6-18 #2 ("Well")  
Section 18U: SW/4NW/4  
Surface Location: 1734'FNL 209'FWL  
Bottom Hole Location: 660' FNL 900' FWL  
Target Formation: Fruitland Coal

Township 33 North, Range 6 West, N.M.P.M.  
Section 18U: SW/4NW/4  
La Plata County, Colorado

Mr. Lynch:

Pursuant to the Colorado Oil and Gas Commission (COGCC) rules and regulations regarding drilling activities, Catamount Energy Partners, LLC (Catamount) hereby gives notice of application for an Oil and Gas Location Assessment (Form 2A) permit. You are receiving this notice because you are the surface owner of the proposed Oil and Gas Location ("Location"). Enclosed in with this letter is a copy of the proposed Form 2A that includes a description of planned equipment and pipelines as well as other information, a scaled facility layout drawing depicting the location of all existing and proposed new Oil and Gas Facilities listed on the Form 2A, a scaled five hundred foot radius improvements drawing, a topographic map showing the planned access, and a topographic map showing all surface water and riparian areas with one thousand feet of the Location. Also enclosed is a copy of the COGCC's information sheet on hydraulic fracturing treatments.

If you would like to contact the Local Government Designee (LGD), you may contact Damian Peduto at La Plata County at 1060 East 2nd Ave, Durango CO 81301 or [damian.peduto@co.laplata.co.us](mailto:damian.peduto@co.laplata.co.us).

You are invited to provide written comments to the LGD, the Operator and to the Director regarding the proposed Oil and Gas Operations, including comments regarding the mitigation measures or Best Management Practices to be used at the Location.

It is your responsibility to give notice of the proposed operation to the tenant farmer, lessee, or other party that may own or have an interest in any crops or surface improvements that could be affected by the proposed operation.

If you would like to meet with Catamount regarding this location or if you have any questions, please contact the undersigned at 720-484-2354.

Sincerely,  
Catamount Energy Partners, LLC

A handwritten signature in black ink, appearing to read "Jared Rush", written in a cursive style.

Jared Rush  
Senior Landman

FORM  
2A

Rev  
08/13

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:

400607994

Date Received:

Oil and Gas Location Assessment

☒ New Location    ☐ Refile    ☐ Amend Existing Location    Location#: \_\_\_\_\_

Submit signed original form. This Oil and Gas Location Assessment is to be submitted to the COGCC for approval prior to any ground disturbance activity associated with oil and gas operations. Approval of this Oil and Gas Location Assessment will allow for the construction of the below specified Location; however, it does not supersede any land use rules applied by the local land use authority. Please see the COGCC website at <http://cogcc.state.co.us/> for all accompanying information pertinent this Oil and Gas Location Assessment.

Location ID:

Expiration Date:

☒ This location assessment is included as part of a permit application.

CONSULTATION

- ☐ This location is included in a Comprehensive Drilling Plan. CDP # \_\_\_\_\_
- ☒ This location is in a sensitive wildlife habitat area.
- ☐ This location is in a wildlife restricted surface occupancy area.
- ☐ This location includes a Rule 306.d.(1)A.ii. variance request.

Operator

Operator Number: 10464

Name: CATAMOUNT ENERGY PARTNERS LLC

Address: 1801 BROADWAY #1000

City: DENVER    State: CO    Zip: 80202

Contact Information

Name: Nolan Redmond

Phone: (720) 484-2344

Fax: (720) 484-2363

email: nredmond@catamountep.com

RECLAMATION FINANCIAL ASSURANCE

☒ Plugging and Abandonment Bond Surety ID: 20130096    ☐ Gas Facility Surety ID: \_\_\_\_\_

☐ Waste Management Surety ID: \_\_\_\_\_

LOCATION IDENTIFICATION

Name: Lynch 34-6-18    Number: 1

County: LA PLATA

QuarterQuarter: SWNW    Section: 18    Township: 34N    Range: 6W    Meridian: N    Ground Elevation: 6858

Define a single point as a location reference for the facility location. When the location is to be used as a well site then the point shall be a well location.

Footage at surface: 1774 feet FNL from North or South section line

211 feet FEL from East or West section line

Latitude: 37.193520    Longitude: -107.549560

PDOP Reading: 2.1    Date of Measurement: 03/14/2014

Instrument Operator's Name: Scott Weibe

## RELATED REMOTE LOCATIONS

(Enter as many Related Locations as necessary. Enter the Form 2A document # only if there is no established COGCC Location ID#)

This proposed Oil and Gas Location is:

LOCATION ID # FORM 2A DOC #

## FACILITIES

Indicate the number of each type of oil and gas facility planned on location

Wells	2	Oil Tanks		Condensate Tanks		Water Tanks	2	Buried Produced Water Vaults	
Drilling Pits		Production Pits		Special Purpose Pits		Multi-Well Pits		Temporary Large Volume Above Ground Tanks	
Pump Jacks	2	Separators	2	Injection Pumps		Cavity Pumps			
Gas or Diesel Motors	2	Electric Motors		Electric Generators		Fuel Tanks		Gas Compressors	
Dehydrator Units		Vapor Recovery Unit		VOC Combustor		Flare		LACT Unit	
								Pigging Station	1

## OTHER FACILITIES

Other Facility Type

Number

Per Rule 303.b.(3)C, description of all oil, gas, and/or water pipelines:

Catamount is currently evaluating pipeline options.

## CONSTRUCTION

Date planned to commence construction: 10/01/2014 Size of disturbed area during construction in acres: 1.82

Estimated date that interim reclamation will begin: 10/31/2014 Size of location after interim reclamation in acres: 1.50

Estimated post-construction ground elevation: 6858

## DRILLING PROGRAM

Will a closed loop system be used for drilling fluids: Yes

Is H<sub>2</sub>S anticipated? No

Will salt sections be encountered during drilling: No

Will salt based mud (>15,000 ppm Cl) be used? No

Will oil based drilling fluids be used? No

## DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: OFFSITE

Drilling Fluids Disposal Method: Commercial Disposal

Cutting Disposal: OFFSITE

Cuttings Disposal Method: Commercial Disposal

Other Disposal Description:

Beneficial reuse or land application plan submitted?

Reuse Facility ID: or Document Number:

Centralized E&P Waste Management Facility ID, if applicable:

## SURFACE & MINERALS & RIGHT TO CONSTRUCT

Name: James Lynch

Phone:

Address: 4588 CR 523

Fax: \_\_\_\_\_

Address: \_\_\_\_\_

Email: \_\_\_\_\_

City: Bayfield State: CO Zip: 81122

Surface Owner: ☒ Fee ☐ State ☐ Federal ☐ Indian

Check all that apply. The Surface Owner: ☐ is the mineral owner

☐ is committed to an oil and Gas Lease

☐ has signed the Oil and Gas Lease

☐ is the applicant

The Mineral Owner beneath this Oil and Gas Location is: ☒ Fee ☐ State ☐ Federal ☐ Indian

The Minerals beneath this Oil and Gas Location will be developed from or produced to this Oil and Gas Location: Yes

The right to construct this Oil and Gas Location is granted by: Bond

Surface damage assurance if no agreement is in place: Blanket Surface Surety ID: 20130097

Date of Rule 306 surface owner consultation \_\_\_\_\_

### CURRENT AND FUTURE LAND USE

#### Current Land Use (Check all that apply):

Crop Land: ☒ Irrigated ☐ Dry land ☐ Improved Pasture ☒ Hay Meadow ☐ CRP

Non-Crop Land: ☐ Rangeland ☐ Timber ☐ Recreational ☐ Other (describe): \_\_\_\_\_

Subdivided: ☐ Industrial ☐ Commercial ☐ Residential

#### Future Land Use (Check all that apply):

Crop Land: ☒ Irrigated ☐ Dry land ☐ Improved Pasture ☒ Hay Meadow ☐ CRP

Non-Crop Land: ☐ Rangeland ☐ Timber ☐ Recreational ☐ Other (describe): \_\_\_\_\_

Subdivided: ☐ Industrial ☐ Commercial ☐ Residential

## CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 994 Feet  
Building Unit: 994 Feet  
High Occupancy Building Unit: 5280 Feet  
Designated Outside Activity Area: 5280 Feet  
Public Road: 202 Feet  
Above Ground Utility: 891 Feet  
Railroad: 5280 Feet  
Property Line: 151 Feet

### INSTRUCTIONS:

- All measurements shall be provided from center of nearest Well or edge of nearest Production Facility to nearest of each cultural feature as described in Rule 303.b.(3)A.
- Enter 5280 for distance greater than 1 mile.
- Building - nearest building of any type. If nearest Building is a Building Unit, enter same distance for both.
- Building Unit, High Occupancy Building Unit, and Designated Outside Activity Area - as defined in 100-Series Rules.

## DESIGNATED SETBACK LOCATION INFORMATION

Check all that apply. This location is within a: ☒ Buffer Zone  
☐ Exception Zone  
☐ Urban Mitigation Area

- Buffer Zone - as described in Rule 604.a.(2), within 1,000' of a Building Unit.
- Exception Zone - as described in Rule 604.a.(1), within 500' of a Building Unit.
- Urban Mitigation Area - as defined in 100-Series Rules.

Pre-application Notifications (required if location is within 1,000 feet of a building unit):

Date of Rule 305.a.(1) Urban Mitigation Area Notification to Local Government: \_\_\_\_\_

Date of Rule 305.a.(2) Buffer Zone Notification to Building Unit Owners: 06/11/2014

## SOIL

List all soil map units that occur within the proposed location. attach the National Resource Conservation Service (NRCS) report showing the "Map Unit Description" report listing the soil typical vertical profile. This data is to used when segregating topsoil.

The required information can be obtained from the NRCS web site at <http://soildatamart.nrcs.usda.org/> or from the COGCC web site GIS Online map page found at <http://colorado.gov/cogcc>. Instructions are provided within the COGCC web site help section.

NRCS Map Unit Name: 10 - Bayfield silty clay loam, 1 to 3 percent slopes

NRCS Map Unit Name: \_\_\_\_\_

NRCS Map Unit Name: \_\_\_\_\_

## PLANT COMMUNITY:

Complete this section only if any portion of the disturbed area of the location's current land use is on non-crop land.

Are noxious weeds present: Yes ☐ No ☒

Plant species from: ☒ NRCS or, ☐ field observation Date of observation: \_\_\_\_\_

List individual species: western wheatgrass, indian ricegrass, junegrass

Check all plant communities that exist in the disturbed area.

- ☐ Disturbed Grassland (Cactus, Yucca, Cheatgrass, Rye)
- ☒ Native Grassland (Bluestem, Grama, Wheatgrass, Buffalograss, Fescue, Oatgrass, Brome)
- ☐ Shrub Land (Mahogany, Oak, Sage, Serviceberry, Chokecherry)
- ☐ Plains Riparian (Cottonwood, Willow, Aspen, Maple, Poplar, Russian Olive, Tamarisk)
- ☐ Mountain Riparian (Cottonwood, Willow, Blue Spruce)
- ☐ Forest Land (Spruce, Fir, Ponderosa Pine, Lodgepole Pine, Juniper, Pinyon, Aspen)
- ☐ Wetlands Aquatic (Bullrush, Sedge, Cattail, Arrowhead)
- ☐ Alpine (above timberline)
- ☐ Other (describe): \_\_\_\_\_

## WATER RESOURCES

Is this a sensitive area: ☒ No ☐ Yes

Distance to nearest

downgradient surface water feature: 151 Feet

water well: 355 Feet

Estimated depth to ground water at Oil and Gas Location 22 Feet

Basis for depth to groundwater and sensitive area determination:

Static water level in adjacent water well

Is the location in a riparian area: ☒ No ☐ Yes

Was an Army Corps of Engineers Section 404 permit filed ☒ No ☐ Yes If yes attach permit.

Is the location within a Rule 317B Surface Water Supply Area buffer No zone:

If the location is within a Rule 317B Surface Water Supply Area buffer have all public water supply systems within 15 miles been notified: No

## GROUNDWATER BASELINE SAMPLING AND MONITORING AND WATER WELL SAMPLING

Water well sampling required per Rule 608

## DESIGNATED SETBACK LOCATION EXCEPTIONS

Check all that apply:

- ☐ Rule 604.a.(1)A. Exception Zone (within 500' of Building Unit)
- ☐ Rule 604.b.(1)A. Exception Location (existing or approved Oil & Gas Location now within a Designated Setback as a result of Rule 604.a.)
- ☐ Rule 604.b.(1)B. Exception Location (existing or approved Oil & Gas Location is within a Designated Setback due to Building Unit construction after Location approval)
- ☐ Rule 604.b.(2) Exception Location (SUA or site-specific development plan executed on or before August 1, 2013)
- ☐ Rule 604.b.(3) Exception Location (Building Units constructed after August 1, 2013 within setback per an SUA or site-specific development plan)

## RULE 502.b VARIANCE REQUEST

- ☐ Rule 502.b. Variance Request from COGCC Rule or Spacing Order Number \_\_\_\_\_

ALL exceptions and variances require attached Request Letter(s). Refer to applicable rule for additional required attachments (e.g. waivers, certifications, SUAs).

## OPERATOR COMMENTS AND SUBMITTAL

Comments Surface owner consult will occur after completeness of Form 2A.



I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct and complete.  
Signed: \_\_\_\_\_ Date: \_\_\_\_\_ Email: nredmond@catamountep.com

Print Name: Nolan Redmond

Title: Geo/Eng Tech

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: \_\_\_\_\_

### **Conditions Of Approval**

**All representations, stipulations and conditions of approval stated in this Form 2A for this location shall constitute representations, stipulations and conditions of approval for any and all subsequent operations on the location unless this Form 2A is modified by Sundry Notice, Form 4 or an Amended Form 2A.**

### **Best Management Practices**

<b>No</b>	<b>BMP/COA Type</b>	<b>Description</b>
1	Wildlife	Assuming Current Rig Availability does not change, Catamount will avoid drilling operations from Dec. 1st- April 15th to minimize disturbance during this critical time period to wildlife.
2	Construction	The following BMPs may be employed during the construction phase: Erosion Control: Seeding, mulching, berms, checks dams, grading techniques Sediment Control: Erosion bales, sediment traps, gravel barriers, sediment basins
3	Drilling/Completion Operations	A closed loop system will be used during drilling operations so a pit will be unnecessary. Multiple wells will be drilled from this pad to mitigate surface impacts.
4	Final Reclamation	Equipment will be painted with dull, none reflective paint darker than the adjacent landscape. Noxious weeds will be controlled onsite by herbicide application based upon recommendations from the La Plata County weed control technical. Spraying will be applied by a professional.

Total: 4 comment(s)

### **Attachment Check List**

<b>Att Doc Num</b>	<b>Name</b>
400624642	CONST. LAYOUT DRAWINGS
400624663	NRCS MAP UNIT DESC
400624666	ACCESS ROAD MAP
400624667	HYDROLOGY MAP
400624668	WELL LOCATION PLAT
400659715	30 DAY NOTICE LETTER
400659725	LOCATION PICTURES
400659728	MULTI-WELL PLAN
400659729	30 DAY NOTICE LETTER
400659736	SURFACE PLAN
400659740	WELL LOCATION PLAT

Total Attach: 11 Files

## General Comments

User Group

Comment

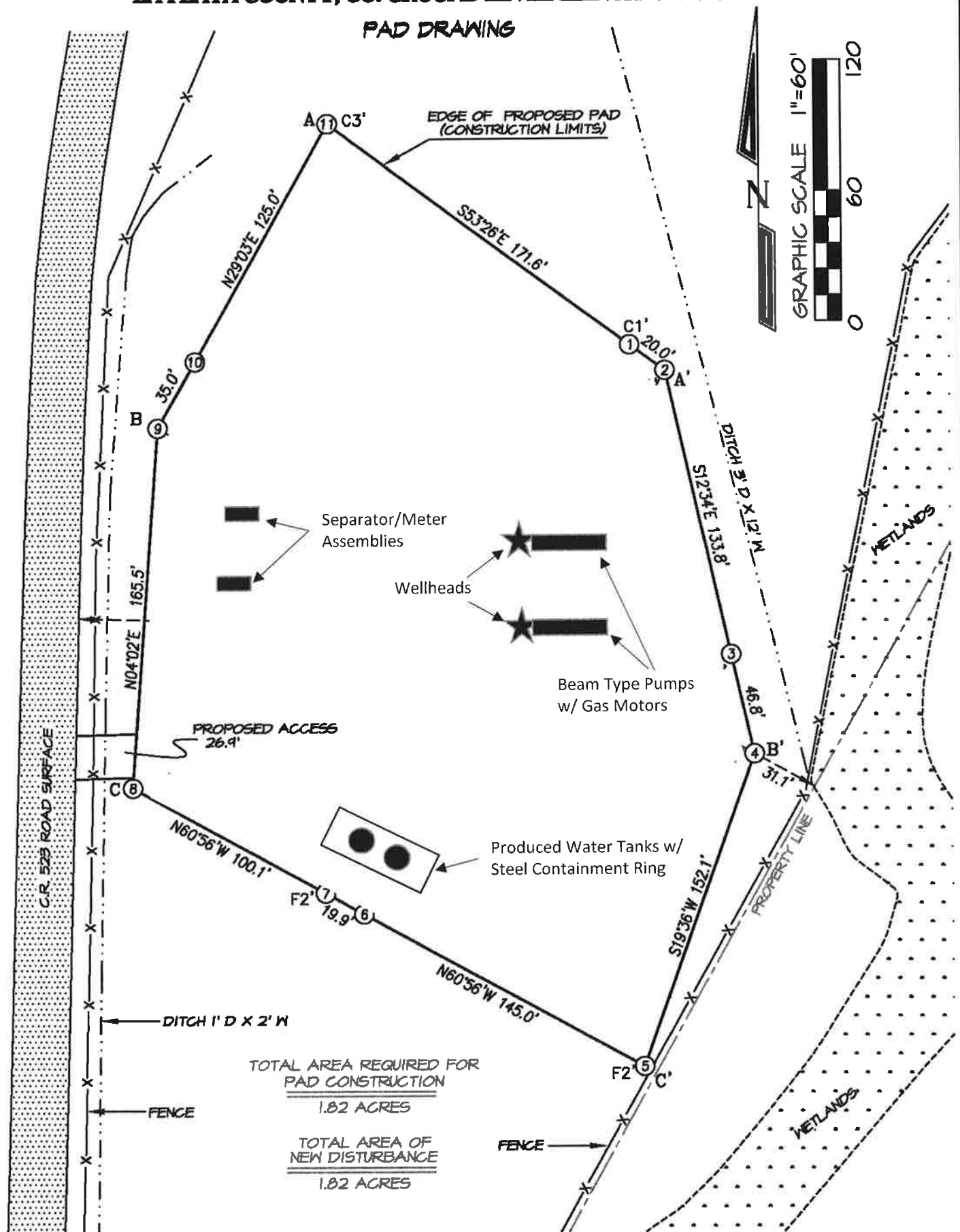
Comment Date

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Total: 0 comment(s)

**CATAMOUNT ENERGY PARTNERS: LYNCH 34-6-18 #1**  
**1774' FNL, 211' FWL, SECTION 18U, T-34-N, R-6-W, S.U.L., N.M.P.M.,**  
**LA PLATA COUNTY, CO. GROUND LEVEL ELEVATION: 6858'**

**PAD DRAWING**



SCALE: 1" = 60'

DATE DRAWN: 5/21/14

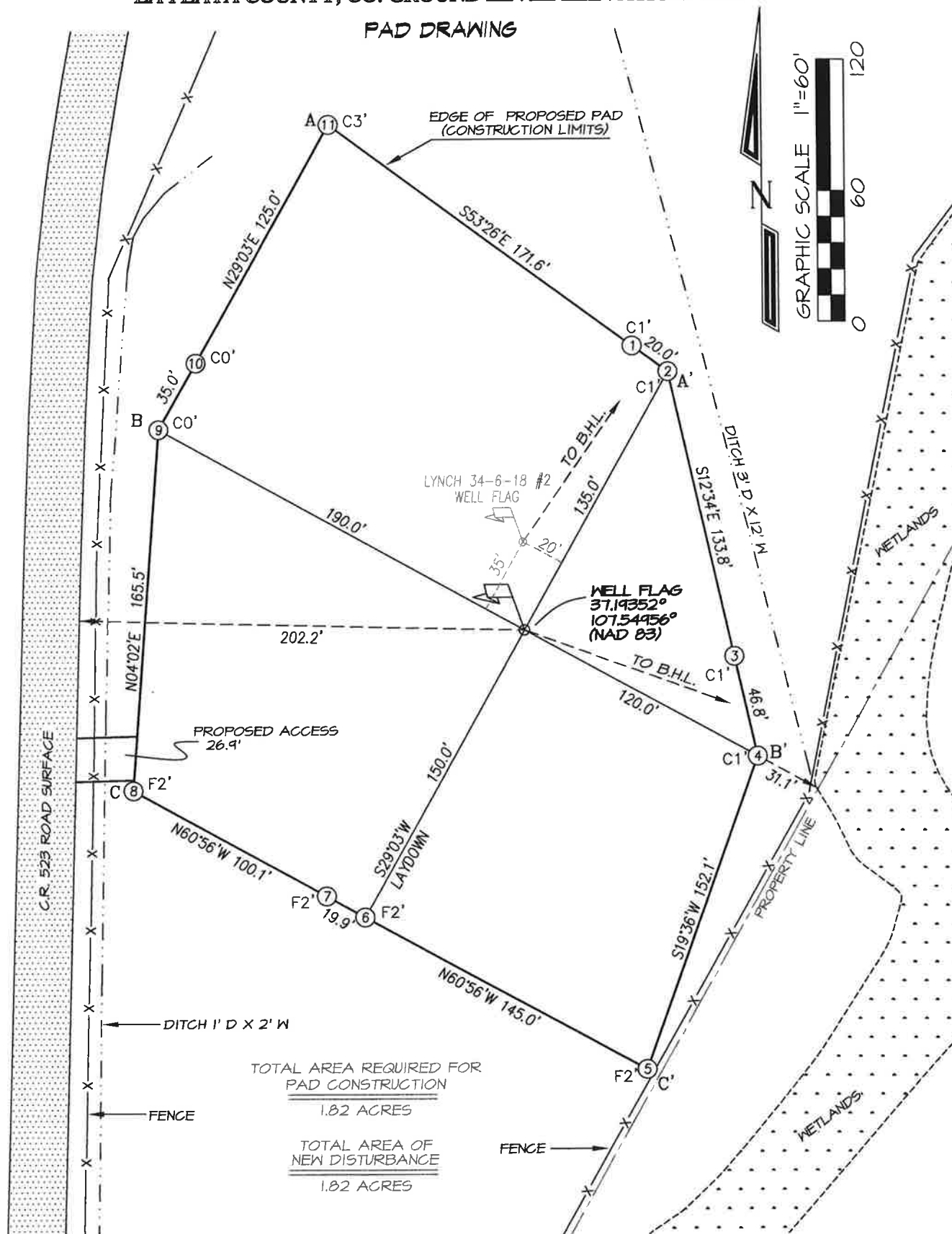
NORTHSTAR SURVEYING & MAPPING, INC.

FILE NO: CEPO3CFA

DRAWN BY: K.R.

CHECKED BY: K.R.

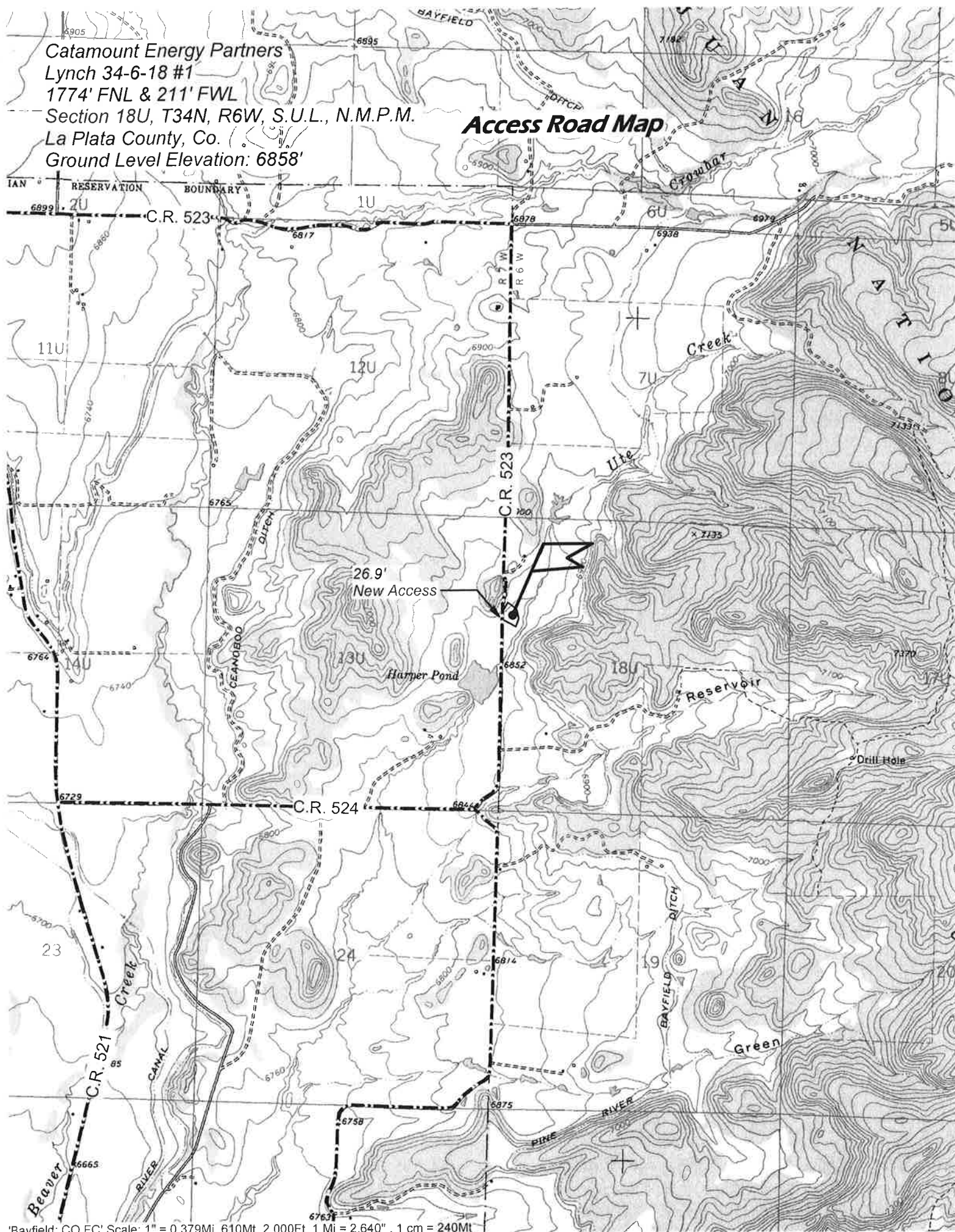
## PAD DRAWING



CHECKED BY: K.R.

Catamount Energy Partners  
Lynch 34-6-18 #1  
1774' FNL & 211' FWL  
Section 18U, T34N, R6W, S.U.L., N.M.P.M.  
La Plata County, Co.  
Ground Level Elevation: 6858'

## Access Road Map

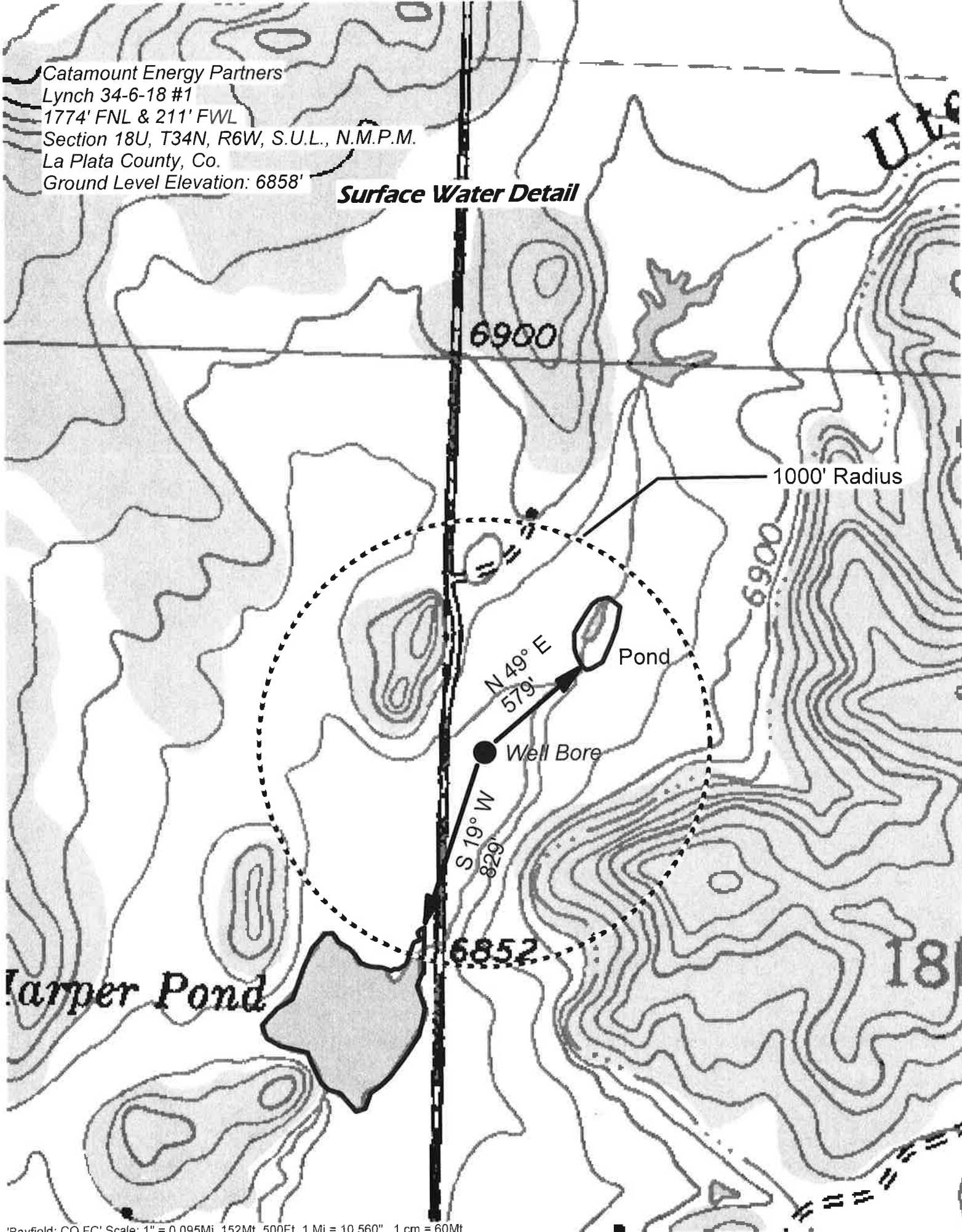


'Bayfield; CO,FC' Scale: 1" = 0.379Mi 610Mt 2,000Ft, 1 Mi = 2.640" , 1 cm = 240Mt



Catamount Energy Partners  
Lynch 34-6-18 #1  
1774' FNL & 211' FWL  
Section 18U, T34N, R6W, S.U.L., N.M.P.M.  
La Plata County, Co.  
Ground Level Elevation: 6858'

### ***Surface Water Detail***





## CONSERVATION COMMISSION

Colorado Department of Natural Resources

# Information on Hydraulic Fracturing

## What is hydraulic fracturing?

Hydraulic fracturing is the process of creating small cracks, or fractures, in deep, underground geological formations to liberate oil or natural gas and allow it to flow up the well for capture and use in heating our homes, fueling our cars and providing the electricity we all use for our televisions, computers and other devices.

To fracture the formation, fracturing fluids – mostly water and sand, with a small percentage of chemical additives – are injected down the well bore into the formation. The fluid, injected under pressure, causes the rock to fracture along weak areas.

The fluids that create the initial fractures are then mixed with thicker fluids that include sand and gelatin. These thicker fluids lengthen the openings in the rock. When the fractures are complete, and pressure is relieved, the fluids flow back up the well where they are captured and stored for later treatment or disposal.

As the fluids flow back up, sand remains in the fractures and props the rock open, maintaining

an open pathway to the well. This allows the oil and gas to seep from the rock into the pathway, up the well and to the surface for collection. In Colorado, the targeted formations for hydraulic fracturing are often more than 7,000 feet underground, and some 5,000 feet below any drinking water aquifers.

The process of hydraulic fracturing has been used for decades in Colorado, dating to the 1970s. Hydraulic fracturing continues to be refined and improved and is now standard for virtually all oil and gas wells in our state, and across much of the country. Hydraulic fracturing has made it possible to get the oil and gas out of rocks that were not previously considered as likely sources for fossil fuels.

## Common questions and answers about hydraulic fracturing.

**Q:** Can hydraulic fracturing open up pathways for oil and gas to reach ground water zones where water wells are producing?

**A:** The distance between the oil and gas formation and the water formations is substantial. In the case of the Niobrara and the Fox Hills Aquifer in northeast Colorado, for example, the separation is about 5,000 feet – or roughly a mile – of bedrock.

**Q:** How do you ensure the fracturing fluid, including the chemical additives, don't escape the oil and gas wellbore and impact nearby water wells?

**A:** The COGCC requires all wells to be cased with multiple layers of steel and cement to isolate fresh water aquifers from the hydrocarbon zone. The steel casing and surrounding layers of cement protect the drinking water aquifers that the wellbore penetrates. Surface casing is required to extend 50 feet below the base of the deepest freshwater aquifer to seal it off from any possible

migration of fluids associated with oil and gas development. After it is determined that the well is capable of producing oil or natural gas, a production casing is set to provide an added layer of separation between the oil or natural gas stream and freshwater aquifer. A well survey called a cement bond log is performed to ensure the cement is properly sealed around the casing. Additionally, the COGCC requires that prior to hydraulic fracturing, the casing be pressure tested with fluid to the maximum pressure that will ever be applied to the casing. The well's construction design is reviewed by the professional engineering staff at the COGCC. Any flaw in the design will be corrected prior to issuing the required drilling permit.

**Q:** What kinds of fluids do operators use to hydraulically fracture wells?

**A:** Approximately 99.5% of the fracturing fluid volume is water and sand. The remaining portion is made up of a variety of chemicals. There are chemical additives used to reduce friction during pumping and prevent corrosion of the steel, biocide to kill bacteria in the water and surfactant to promote water flowback. The exact formulation may vary depending on the well and the objectives of the specific fracturing treatment. Fracturing chemicals are similar to other industrial chemicals which must be handled properly. For certain chemicals, safe work practices, proper site preparation, and attentive handling are required to ensure that employees, the public, and the environment are protected.

COGCC rules require that operators publicly disclose the ingredients and concentrations of fracturing chemicals for each well within 60 days of completion. That information is required to be posted on the website [www.fracfocus.org](http://www.fracfocus.org), which is searchable by county, operator and well. The website also provides information on chemicals used and their purpose.

**Q:** *How are these fluids managed on the surface?*

**A:** Large volumes of fluids are maintained on the drill site during the drilling and hydraulic fracturing process. Operators must take great care to prevent spills; operators are charged with protecting environmental resources and spills violate state law. The fluids are blended on site in equipment that adjusts the mix of sand, water and chemicals at different stages of the operation. The blended mix is sent to pumping units to raise the pressure and send the fluid down the well. Like spills, operators must prevent leaks. In addition to complying with state regulations, leaks and spills would create costly delays, providing additional incentive for operators to ensure all fittings and connections are pressure tested with clean water before any operations begin.

After the fracturing is completed, fluids return to the surface as "flowback." These fluids are now considered exploration and production waste and must be treated accordingly in compliance with state regulations. Production fluids, including oil and related substances, also rise to the surface. All of these fluids must be separated and contained in impervious vessels and waste fluids must either be recycled or properly disposed of under regulatory oversight.

**Q:** *What can neighbors expect to experience during the fracture stimulation work?*

**A:** After the drilling rig is moved off site, water tanks are brought to the site and water-hauling trucks arrive. The day the operation is to begin, the sand haulers, pump truck, blender and the control van arrive. The equipment will all be connected together and then connected to the well head with high pressure hoses. After testing the equipment, the actual fracture stimulation will begin. The operation may take several hours

to several days depending on the number of fracture zones. You will not feel the fracture of the rock because of its very low energy and depth of the formation. The equipment noise is the most noticeable occurrence during the operations.

**The COGCC has rules that are specific to hydraulic fracturing.** For more information on these rules, visit: <http://cogcc.state.co.us>

- [Rule 205](#) Inventory chemicals
- [Rule 205A](#) Chemical disclosure
- [Rule 317](#) Well casing and cementing; Cement bond logs
- [Rule 317B](#) Setbacks and precautions near surface waters and tributaries that are sources of public drinking water
- [Rule 341](#) Monitoring pressures during stimulation
- [Rule 608](#) Special requirements for coal-bed methane wells
- [Rules 903 & 904](#) Pit permitting, lining, monitoring, & secondary containment
- [Rule 906](#) Requires COGCC notify CDPHE and the landowner of any spill that threatens to impact any water of the state

*Where can I get further information?*

The FracFocus website – [www.fracfocus.org](http://www.fracfocus.org) – contains detailed explanations on how hydraulic fracturing works, how groundwater is protected, what chemicals are used, and how to find a well near you. The COGCC has additional information on its hydraulic fracturing information page at its website: <http://cogcc.state.co.us>

*What is the purpose of baseline water sampling?*

The purpose of baseline water sampling is to collect data before any drilling operations at individual well sites to demonstrate the pre-drilling conditions of a water well. This provides a reference point for future evaluations of any

suspected impacts by the drilling or hydraulic fracturing of oil and gas wells.

*How do I obtain baseline water samples?*

The COGCC provides baseline sampling on a case-by-case basis based on proximity to new or existing drilling activity. Please contact the COGCC at 303-894-2100.

The Colorado Oil & Gas Association (COGA), an industry trade group, has a voluntary baseline ground water quality sampling program <http://www.coga.org/index.php/BaselineWaterSampling>.

Under the COGA program, samples are collected from two existing groundwater features, such as wells or springs, within one-half mile of the surface location of new oil and gas well pads, or new wells on existing pads. These samples require landowner consent and will be collected before drilling begins. A second round of sampling will be collected from each feature within one to three years after drilling is completed. Results of all samples will be provided to landowners within three months of collecting the sample. The laboratory results will also be submitted to the COGCC for inclusion in a water quality database that will be available to the public through the COGCC website.

Water well owners can also either sample their own water wells or contract a qualified individual to collect samples for baseline testing. Most analytical laboratories can provide sampling along with analytical services. A list of laboratories offering these services can be found under Laboratories-Analytical or Laboratories-Testing in the phone directory.

The Colorado Department of Public Health and Environment also offers analytical laboratory services. Call 303-692-3090 for additional information.

<http://www.cdphe.state.co.us/lr/water.htm>





Colorado Department of Natural Resources

## **OIL AND GAS WELL NOTIFICATION, CONSULTATION, AND RECLAMATION RULES**

### **INFORMATION FOR OIL AND GAS OPERATORS, SURFACE OWNERS AND SURFACE TENANTS**

***DISCLAIMER:*** *Surface owners are advised to obtain legal advice as may be appropriate to their particular circumstances. Landowners may or may not own the mineral rights underlying their property. In either case, surface owners and tenants may be faced with oil and gas mineral owners exercising their right to drill and produce wells on the property. This brochure is designed to describe the key points of the regulations for the reclamation of land disturbed by oil and gas activity. These regulations are enforced by the Colorado Oil and Gas Conservation Commission.*

*This brochure is a summary only, and is not to be used as a substitute for the complete rules and regulations.*

revised 08/25/2006

## STATEWIDE OIL AND GAS RECLAMATION RULES

The Colorado Oil and Gas Conservation Commission's (COGCC) statewide reclamation rules are designed to ensure that the surface of the land is restored as closely as possible to its pre-development condition. These rules respect the surface owner's need to request waivers of certain requirements under special circumstances.

The rules were developed with input from the oil and gas industry, the agricultural industry, the environmental community, and local governments. The COGCC also consulted with the Colorado Agricultural Commission as the rules were being written.

### ***CROP LAND OR NON-CROP LAND? (100 Series Rules Definitions)***

The requirements for notification by oil and gas operators to surface owners, as well as site construction and reclamation requirements, depend on whether or not the wellsite and access road are built on **Crop Land** or **Non-Crop Land**.

**Crop Land**--Lands which are cultivated, mechanically or manually harvested, or irrigated for vegetative agricultural production.

**Non-Crop Land**--Lands which are **not** defined as Crop Land, including range land.

### ***SURFACE OWNER NOTIFICATION BY THE OIL AND GAS OPERATOR (Rule 305)***

Before drilling, the oil and gas operator is required to:

- mail or deliver a notice to the **surface owner** and local government (to identify a surface owner for the purpose of giving the Rule 305 notice, the operator may rely on the records at the assessor for the county where the oil and gas operations will occur); and
- post a notice on the drillsite.

Notice is also required:

- if future operations are planned at an existing well site that cause significant surface disturbances, and
- before final reclamation of the wellsite and access roads.

The notice timing requirements depend on the type of oil and gas operations:

<u>OPERATION</u>	<u>CROP LAND</u>	<u>NON-CROP LAND</u>
Drilling	30 Days	30 Days
Additional Notice of Drilling on Irrigated Crop Land	14 Days	Does Not Apply
Future Well Operations	7 Days	7 Days
Final Reclamation	30 Days	30 Days

### **PURPOSE OF NOTICE**

The purpose of the surface owner notice is to inform the surface owner about when and where the oil and gas operations are to take place so that the surface owner and tenant can make plans to coordinate their own land use with the oil and gas operations.

The COGCC rules require an oil and gas operator to ask the surface owner if he/she wants to be consulted about the timing of the operations and the locations of the wellsite and access road, as well as the final reclamation operations. In addition, the COGCC Onsite Inspection Policy requires an oil and gas operator to provide the surface owner with a copy of the Onsite Inspection Policy and an Onsite Inspection Request Form, along with the Rule 305 surface owner notification. (See "Onsite Inspections" on page 4.)

### **SURFACE TENANT NOTIFICATION (Rule 305.e.)**

It is the surface owner's responsibility to notify the surface tenant about the proposed oil and gas operations.

### **SURFACE OWNER CONSULTATION (Rule 306)**

The oil and gas operator is required to offer to consult with the surface owner about the locations of wellsites and access roads, and about final reclamation. ***The operator has no obligation to consult with a surface tenant unless the surface owner appoints a tenant for consultation.***

Local government representatives may also participate in the consultation about wellsite and access road locations if they desire. Local governments receive notice of wells to be drilled if they request to participate in the COGCC local governmental designee program.

### **ONSITE INSPECTIONS**

On lands where the surface owner did not execute a lease or is not party to a surface use agreement, the surface owner may request the COGCC to conduct an onsite inspection with the surface owner and the oil and gas operator. Local government representatives may also participate if desired by the surface owner. The purpose of the inspection is to determine if technical or operational conditions should be attached to the permit to avoid potential unreasonable loss of crops or land, to address issues regarding health, safety, welfare or environmental impacts, and to ensure compliance with COGCC rules regarding advance notice and good faith consultation.

***The onsite inspection will not address matters of surface owner compensation, diminution of property values, future property use, or other private party contractual issues between the operator and the surface owner. Please see the COGCC Onsite Inspection Policy for details about requesting an onsite inspection***

**SITE PREPARATION - FENCING (Rule 1002.a.)**

**On all lands:** ***At the surface owner's request***, and where livestock is in the immediate area, the operator is required to fence the drilling mud reserve pit on wells that are being drilled, and the wellhead, pit, and production equipment on producing wells.

**On Crop Land:** ***At the surface owner's request***, the oil and gas operator is required to mark the boundaries of drillsites and access roads with berms, single strand fences, or other equivalent methods to minimize surface disturbance.

**SOIL SEGREGATION WHILE EXCAVATING (Rule 1002.b.)**

**On Crop Land:** While performing all excavations, the oil and gas operator is required to segregate all A (topsoil), B, and C soil horizons, and stockpile each of these soils separately. Deeper soil horizons are segregated to a depth of six feet.

**On Non-Crop Land:** The A (topsoil) horizon, or the top six inches of soil (whichever is deeper) is required to be segregated and stockpiled separately at all excavation

*If soil horizons are too rocky or too thin to segregate, the topsoil is segregated as much as possible and stored separately. On crop land, other deeper soil layers are segregated as much as possible to a depth of three (3) feet.*

**MINIMIZING SURFACE DISTURBANCE DURING DRILLING OPERATIONS (Rule 1002.e.)**

**On all lands:** Drilling locations are required to be designed and constructed in a manner that minimizes the total disturbed area. Steep slopes are to be avoided where possible, and deep cut and fills are to be constructed to the least possible slope. Existing access roads are to be used where possible, and oil and gas operators are encouraged to share access roads when developing a field. Operators are required to limit their travel to within original access road boundaries to reduce land damage.

**RECLAMATION BEGINS SOON AFTER A WELL IS DRILLED AND COMPLETED (Rule 1003)**

After a well is drilled, all areas which were disturbed by the drilling operations, and which are not needed for production operations, are to be reclaimed as close to their original condition as possible.

This "interim reclamation" is required to take place:

**On Crop Land:** No later than three (3) months after a well is completed.

**On Non-Crop Land:** No later than twelve (12) months after a well is completed.

**On all lands:** Interim reclamation includes:

- removing drilling waste materials and filling of pits and holes;
- removing compaction from the soil in areas no longer needed for oil and gas operations by cross-ripping the soil to a depth of eighteen (18) inches;
- closing drilling pits by drying out the pit and backfilling it by replacing the soil layers in their original positions;
- subsidence over the closed drilling pit is required to be corrected by the operator for two (2) years following pit closure by adding additional topsoil.

**On Crop Land:** Additional interim reclamation requirements include:

- guy line anchors for drilling and completion rigs are to be removed if requested;
- all bentonite drilling fluid is to be removed from the drilling pit before drying, and a minimum backfill cover of three (3) feet must be placed over any remaining contents in the pit;
- subsidence over any reclaimed area, including a closed drilling pit, is required to be corrected by the oil and gas operator by adding additional topsoil during the life of the well.

**INTERIM RESTORATION AND REVEGETATION (Rule 1003)**

**On all lands:** The oil and gas operator is required to replace all soils to their original positions and contour, and to adequately till the soil.

**On Crop Land:** The operator is required to prevent weeds and erosion, and to re-establish perennial crops that were present before drilling.

**On Non-Crop Land:** The operator is required to re-seed the disturbed area in the first favorable season. Re-seeding is done according to a surface owner agreement or in consultation with the local soil conservation district in the absence of an agreement. Re-seeding with a species consistent with the adjacent plant community is encouraged.

#### ***FINAL RECLAMATION (Rule 1004)***

Final reclamation takes place after oil and gas wells are plugged and abandoned. All final reclamation work is required to be completed:

**On Crop Land:** No later than three (3) months after a well is plugged and abandoned.

**On Non-Crop Land:** No later than twelve (12) months after a well is plugged and abandoned.

**On all lands:** An oil and gas operator is required to

- remove all production equipment and debris;
- remove or treat any remaining production waste or contamination from spills or releases following COGCC rules;
- backfill all production pits by replacing the soils in their original positions;
- correct subsidence over closed production pit locations by adding additional topsoil;
- close access roads to plugged and abandoned wells and associated facilities;
- re-grade and re-contour the wellsite and access roads;
- perform compaction removal, restoration, and revegetation on well-sites and access roads to the same standards as those for interim reclamation on both Crop Land and Non-Crop Land;
- comply with all COGCC rules unless a surface owner waiver or Commission variance is obtained.

#### ***FLOWLINE INSTALLATION, MAINTENANCE, RECLAMATION, AND ABANDONMENT (Rule 1101)***

**On all lands:**

- All oil and gas well flowlines are required to be buried deep enough to protect them from damage.
- Flowlines may be installed above ground if certain difficult conditions prevent burial or by agreement with the surface owner.

**On Crop Land:**

- Flowlines must be covered by a minimum of three (3) feet of soil unless prevented by certain difficult burial conditions, or the surface owner agrees to a shallower depth.
- When excavating trenches wider than twelve inches, the operator is required to segregate topsoil and backfill trenches to return the soils to their original positions and contour.
- Efforts are to be made to run flowlines parallel to crop irrigation rows on flood irrigated land.

#### ***MAINTENANCE (Rule 1102)***

**On all lands:** Flowline trenches are to be maintained to correct subsidence and prevent erosion, with interim and final reclamation being

performed to the same standards as for wellsites and access roads. To prevent flowline leaks, flowlines are to be pressure tested upon installation, and then each year afterward

#### ***FLOWLINE ABANDONMENT (Rule 1103)***

**On all lands:** When flowlines are abandoned:

- the lines are emptied of oil and gas;
- the lines are cut off below the ground surface;
- the lines are capped at the ends.

#### ***OIL AND GAS WELL AND TANK BATTERY SIGNS (Rule 210.b.)***

Oil and gas operators are required to post permanent signs at wells and tank batteries that identify the operator and provide location and emergency notification information. Signs must be posted within sixty (60) days after the COGCC approves a change of operator.

#### ***COGCC COMPLAINT PROCESS (Rule 522)***

If a surface owner or tenant has a complaint about an oil and gas operation, the COGCC encourages them to first contact the operator to see if a solution can be found that works for both parties. If no satisfactory solution can be found, a surface owner or tenant may file a complaint, preferably in writing on a COGCC Complaint Report Form (Form 18), with the COGCC. The COGCC staff includes field inspectors, engineers and environmental specialists who are available to investigate complaints and take enforcement action if rule violations are found. If the COGCC enforcement process does not adequately address a surface owner or tenant complaint, an application can be filed for a Commission hearing.

#### ***COGCC HEARING APPLICATION PROCESS (Rules 503 and 522.c.)***

Surface owners and tenants may file an application for hearing before the Commission for the following purposes:

- to seek a variance from the COGCC Rules if the Director does not grant a variance request administratively
- to seek an Order Finding Violation if they object to the COGCC staff's formal resolution of their complaint

Applications for Commission hearings are required to include a written description of the requested relief and the factual grounds for the relief. All hearing applications are to be filed at least fifty (50) days in advance of the desired hearing date. No application fee is required. Contact the COGCC Hearings Manager for further information on hearing application procedures.

The COGCC has offices located throughout the state:

Main Office: 1120 Lincoln Street, Suite 801  
Denver, CO 80203  
(303) 894-2100 - phone  
(303) 894-2109 - fax  
Toll-free Complaint Line to Denver:  
(888) 235-1101

Greeley: (970) 506-9834 – phone  
Sterling: (970) 522-6747 – phone  
Trinidad: (719) 846-4715 – phone  
Parachute: (970) 285-5661 – phone  
Parachute: (970) 285-9000 – phone  
Durango: (970) 259-4587 – phone  
Broomfield: (303) 469-1902 – phone  
De Beque: (970) 283-8635 – phone

Visit the COGCC Website at:

[www.oil-gas.state.co.us](http://www.oil-gas.state.co.us)

Information available on the website includes:

- COGCC Rules and Regulations and the Oil and Gas Conservation Act
- COGCC Onsite Inspection Policy
- COGCC Staff Contact Information
- A listing of Local Governmental Designees
- A listing of all pending and approved Applications-to-Drill
- A calendar of COGCC hearings
- The COGCC Information System including a Geographic Information System (GIS) Map interface
- Typical Questions from the Public About Oil and Gas Development

