

**FORM
INSP**Rev
05/11**State of Colorado
Oil and Gas Conservation Commission**1120 Lincoln Street, Suite 801, Denver, Colorado 80203
Phone: (303) 894-2100 Fax: (303) 894-2109

Inspection Date:

05/20/2016

Document Number:

673403187

Overall Inspection:

ACTION REQUIRED**FIELD INSPECTION FORM**

Location Identifier	Facility ID	Loc ID	Inspector Name:	On-Site Inspection	
	299110	324766	Waldron, Emily	2A Doc Num:	

Operator Information:OGCC Operator Number: 10468Name of Operator: THUNDER RIVER PRODUCTION LLCAddress: 1455 WEST LOOP SOUTH #230City: HOUSTON State: TX Zip: 77027

- ☐ THIS IS A FOLLOW UP INSPECTION
- ☒ FOLLOW UP INSPECTION REQUIRED
- ☐ NO FOLLOW UP INSPECTION REQUIRED
- ☐ INSPECTOR REQUESTS FORM 42 WHEN CORRECTIVE ACTIONS ARE COMPLETED

Contact Information:

Contact Name	Phone	Email	Comment
		john.stevens@thunder-river.com	
		dacockrell@thunder-river.com	

Compliance Summary:QtrQtr: SWSE Sec: 18 Twp: 6N Range: 78W

Insp. Date	Doc Num	Insp. Type	Insp Status	Satisfactory /Action Required	PA P/F/I	Pas/Fail (P/F)	Violation (Y/N)
02/06/2012	662300171	PR	SI	SATISFACTORY			No
10/17/2011	200326445	PR	TA	ACTION REQUIRED			Yes
05/05/2011	200311127	PR	TA	ACTION REQUIRED			Yes

Inspector Comment:**Related Facilities:**

Facility ID	Type	Status	Status Date	Well Class	API Num	Facility Name	Insp Status	
299110	WELL	PR	04/01/2015	OW	057-06483	Fuqua 19-02-10-1H	PR	<input checked="" type="checkbox"/>

Equipment:Location Inventory

Special Purpose Pits: _____	Drilling Pits: <u>1</u>	Wells: <u>1</u>	Production Pits: _____
Condensate Tanks: _____	Water Tanks: <u>2</u>	Separators: <u>1</u>	Electric Motors: _____
Gas or Diesel Mortors: _____	Cavity Pumps: _____	LACT Unit: _____	Pump Jacks: <u>1</u>
Electric Generators: _____	Gas Pipeline: _____	Oil Pipeline: _____	Water Pipeline: _____
Gas Compressors: _____	VOC Combustor: <u>1</u>	Oil Tanks: <u>3</u>	Dehydrator Units: _____
Multi-Well Pits: _____	Pigging Station: _____	Flare: _____	Fuel Tanks: _____

Location

Lease Road:				
Type	Satisfactory/Action Required	comment	Corrective Action	Date

Signs/Marker:				
Type	Satisfactory/Action Required	Comment	Corrective Action	CA Date
WELLHEAD	ACTION REQUIRED	No wellhead sign.	Install sign to comply with rule 210.	06/23/2016
BATTERY	ACTION REQUIRED	Former operator on battery sign and all signs on location. Form 10 making Thunder River operator approved 8/15/2013 document number 1534795.	Install sign to comply with rule 210.	06/23/2016
TANK LABELS/PLACARDS	ACTION REQUIRED	Three tanks labeled with both Produced Water and Crude Oil contents and NFPA diamonds. Tank labels need to accurately reflect contents in tank. Two tanks do not have contents or NFPA diamonds.	Install sign to comply with rule 210.	06/23/2016

Emergency Contact Number (S/AR): ACTION Corrective Date: 06/23/2016

Comment: Emergency contact information belongs to previous operator.

Corrective Action: Install sign to comply with Rule 210.b.

Good Housekeeping:				
Type	Satisfactory/Action Required	Comment	Corrective Action	CA Date
STORAGE OF SUPL	ACTION REQUIRED	Equipment stored on location including but not limited to tubing, pipe racks.	Comply with Rule 603.f using the Rule 603.f guidance document for further details.	08/23/2016

Spills:				
Type	Area	Volume	Corrective action	CA Date
<input type="checkbox"/> Multiple Spills and Releases?				

Fencing/:				
Type	Satisfactory/Action Required	Comment	Corrective Action	CA Date
LOCATION	SATISFACTORY			

Equipment:			
Type: Horizontal Separator	# 1	Satisfactory/Action Required:	SATISFACTORY
Comment	40.48472, -106.18451		
Corrective Action			Date:

Inspector Name: Waldron, Emily

Type: Vertical Heated Separator	# 1	Satisfactory/Action Required:	SATISFACTORY
Comment 40.48472, -106.18451			
Corrective Action			Date:
Type: Flare	# 2	Satisfactory/Action Required:	SATISFACTORY
Comment Field flare and combustor. 40.48426, -106.18478			
Corrective Action			Date:
Type: Bird Protectors	#	Satisfactory/Action Required:	SATISFACTORY
Comment			
Corrective Action			Date:
Type: Plunger Lift	# 1	Satisfactory/Action Required:	SATISFACTORY
Comment			
Corrective Action			Date:
Type: Deadman # & Marked	# 4	Satisfactory/Action Required:	SATISFACTORY
Comment			
Corrective Action			Date:

Facilities: ☐ New Tank Tank ID: _____

Contents	#	Capacity	Type	SE GPS
CRUDE OIL	1	400 BBLS	HEATED STEEL AST	,

S/AR	SATISFACTORY	Comment:	
Corrective Action:		Corrective Date:	

Paint

Condition	Adequate
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Other (Content) _____

Other (Capacity) _____

Other (Type) _____

Berms

Type	Capacity	Permeability (Wall)	Permeability (Base)	Maintenance
Metal	Adequate			Adequate

Corrective Action		Corrective Date	
Comment			

Facilities: ☐ New Tank Tank ID: _____

Contents	#	Capacity	Type	SE GPS
	2	400 BBLS	HEATED STEEL AST	40.484460, -106.184460

S/AR	SATISFACTORY	Comment:	No content or NFPA labels. Stained gravel around base of both tanks.
Corrective Action:		Corrective Date:	

Paint

Condition	Adequate
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Other (Content) _____

Other (Capacity) _____

Inspector Name: Waldron, Emily

Other (Type) _____

Berms

Type	Capacity	Permeability (Wall)	Permeability (Base)	Maintenance
Metal	Adequate			Adequate

Corrective Action		Corrective Date	
Comment			

Facilities:

☐ New Tank

Tank ID: _____

Contents	#	Capacity	Type	SE GPS
PRODUCED WATER	3	400 BBLS	HEATED STEEL AST	,

S/AR	SATISFACTORY	Comment:	Tanks are labeled with both Crude Oil and Produced Water labels and NFPA labels.
Corrective Action:		Corrective Date:	

Paint

Condition	Adequate
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Other (Content) _____

Other (Capacity) _____

Other (Type) _____

Berms

Type	Capacity	Permeability (Wall)	Permeability (Base)	Maintenance
Metal	Adequate			Adequate

Corrective Action		Corrective Date	
Comment			

Venting:

Yes/No	NO
Comment	

Flaring:

Type	Ignitor/Combustor	Satisfactory/Action Required	SATISFACTORY
Comment:			
Corrective Action:		Correct Action Date:	

Predrill

Location ID: 299110

Lease Road Adeq.: _____

Pads: _____

Soil Stockpile: _____

S/AR: _____

Corrective Action: _____ Date: _____ CDP Num.: _____

Form 2A COAs:

Group	User	Comment	Date
OGLA	kubeczko	<p>GENERAL SITE COAs:</p> <p>Operator must ensure 110 percent secondary containment for any volume of fluids contained at well site during drilling and completion operations; including, but not limited to, construction of a berm or diversion dike, diversion/collection trenches within and/or outside of berms/dikes, site grading, or other comparable measures (i.e., best management practices (BMPs) associated with stormwater management) sufficiently protective of nearby surface water. Any berm constructed at the well pad location will be stabilized, inspected at regular intervals, and maintained in good condition..</p> <p>Operator must implement best management practices to contain any unintentional release of fluids, including any fluids conveyed via temporary surface pipelines or buried permanent pipelines.</p> <p>Flowback and stimulation fluids must be sent to tanks to allow the sand to settle out before the fluids can be placed into any pipeline or pit located on the well pad. The flowback and stimulation fluid tanks must be placed on the well pad in an area with additional downgradient perimeter berming. The area where flowback fluids will be stored/reused must be constructed to be sufficiently impervious to contain any spilled or released material.</p> <p>Berms or other containment devices shall be constructed to be sufficiently impervious to contain any spilled or released material around crude oil, condensate, and produced water storage tanks.</p>	05/30/2011

S/AR: SATISFACTORY**Comment:****CA:****Date:****Wildlife BMPs:**

BMP Type	Comment
Wildlife	<p>Initial Consultation with CDOW Michael Warren 5/16/2011 LARAMIE ENERGY II, LLC</p> <p>Best Management Practices (BMP's) To Reduce Impacts to Wildlife For Operations on the Fuqua 18-15 Pad SWSE Sec 18, Twn. 6N Rng. 78W 6th PM Within Sensitive Wildlife Habitat Area of Fuqua Ranch Jackson County, CO</p> <p>In an effort to minimize the impacts to wildlife, the following BMP's are part of Laramie Energy II's (LEII) standard operating procedures for drilling and operations within Western and Northwest Colorado. This list is a partial of LEII's policy.</p> <p>Initial Stages for Infrastructure and Roads</p> <p>1. Road design and General</p> <ul style="list-style-type: none"> - No firearms, no dogs on location, and no feeding of wildlife. - Minimize the amount of traffic on lease roads within 3 hours of sunrise and sunset. - Use existing routes as much as possible to avoid new disturbance and habitat fragmentation and minimize new road construction. - Maximize the topography as much as possible in designing roads to reduce, visual, noise, impacts, etc. - Participate in road sharing agreements with other Operators when possible. - Design and surface roads based on the traffic, speed, and type of vehicles to reduce, dust, mud, and environmental damage. - Locate roads away from riparian areas and bottoms of drainages as much as possible or re-route entirely. - Obtain Army Corp of Engineer Permits for any stream crossings prior to construction.

- Analyze crossings and flow characteristics to determine the best method of crossing, (i.e. culvert, bridge, or low water).
- Armor all stream crossings to reduce erosion and to comply with Stormwater Requirements.
- Implementation of fugitive dust control measures including but not limited to water or magnesium chloride applications, and road surfacing.
- Limit traffic to the minimum needed for safe and efficient operations.
- No driving or parking off of disturbed areas.
- Install and use locked gates or other means when allowed by landowner or Federal Agencies to prevent unauthorized travel on roads and rights-of ways.

2. Well pad design and location

- Locate well pads to maximize directional drilling practices. LEII currently plans and attempts to locate pads for 16-20 wells which equates to roughly 4 well pads per section.
- Design each location to accommodate both current and future gas production.
- Locate well pads to minimize disturbance yet maximize use to reduce surface impacts.
- Review State and Federal GIS mapping to avoid Sensitive Wildlife Habitat (SWH), Restricted Surface Occupancy (RSO) areas, steep slopes, etc., as much as possible with roads and pad location.
- Design and install gathering lines within the disturbed area of new roads and adjacent to as much as possible to reduce disturbance construction.
- Design Rights-of Way widths to the minimum needed for safe and efficient construction of pipelines
- Remote Telemetry for production operations

3. Drilling and Production Operations

- Implement remote telemetry in all operations
- Where topographically possible and subject to landowner approval, use centralized water gathering and transportation systems.
- Install exclusionary devices to prevent bird and other wildlife access to equipment stacks, vents, and openings.
- Locate facilities to minimize visual effects (e.g. paint color, screening, etc.)
- LEII implements a closed system in its operations. No fluid pits are constructed or used during drilling or completion operations.
- LEII implements an aggressive weed management program. LEII incorporates and uses the BLM Glenwood Springs Energy Office's "Noxious and Invasive Weed Management Plan for Oil and Gas Operators- March 2007" for all operations. Each spring, Laramie inventories all pads, roads, and pipelines to insure no noxious weeds have been introduced. If noxious weeds are found, the county will be notified and the weeds will be treated. Weeds are continuously monitored and treated throughout the growing season. Only herbicides approved by the EPA and State are used by certified weed applicators.

4. Reclamation

- Strip and segregate topsoil from other soil horizons during pad, road, and pipeline construction.
- Minimize topsoil degradation by windrowing no higher than 5 feet when possible.
- Immediately seed topsoil to reduce erosion and prevent weed establishment and maintain soil microbial activity.
- Use only certified weed free native seed mixes, unless recommended otherwise by Federal Agencies or the Landowner.
- Use locally adapted seed when available.
- Use diverse seed mixes to mirror the surrounding area unless recommended otherwise by Federal Agencies or the Landowner.
- Monitor re-vegetation success until a minimum of 75% of preferred perennial plant cover (no weeds) is established.
- Perform "interim" reclamation on all disturbed areas not needed for active producing operations.
- If possible, conduct interim and final reclamation during optimum periods (e.g. late fall/early winter or early spring).
- If needed, fence reclaimed areas to minimize livestock/wildlife impact until plant species have are capable of sustaining grazing.

LARAME ENERGY II, LLC
BMPS FOR
Sensitive Wildlife Habitat and Restricted Surface Occupancy

Areas Specific to Laramie Energy II, LLC
Operations For the Fuqua 18-15 Pad
Jackson County, CO

Sensitive Wildlife Habitat (SWH)

Black Bear

- Initiate a food and waste/refuse management program that uses bear-proof food storage containers and trash receptacles.
- Initiate an education program that reduces bear conflicts.
- Establish policy to prohibit keeping food and trash in sleeping quarters.
- Establish policy to support enforcement of state prohibition on feeding of black bear.
- Report bear conflicts immediately to CDOW .

Gunnison and Greater Sage Grouse(SWH)

The proposed location is an existing site constructed in 2008 that bisects the 4 mile buffer of a known Gunnison or Greater sage-grouse lek to the north. The anticipated move-in date to drill the proposed well is late July-early August. If the well proves to be capable of production in paying quantities Laramie Energy II, LLC will consult with the CDOW with the landowner's concurrence for any additional mitigation requirements.

Laramie Energy II will:

- Consult with the CDOW if a development program is warranted
- Restrict well site visitations to portions of the day between 0900-1600 hrs.
- Establish company guidelines to minimize wildlife mortality from vehicle collision on roads.
- Install raptor perch deterrents on equipment.
- Remove all unnecessary infra-structure.
- Use early and effective reclamation techniques, including aggressive interim reclamation program, to return habitat to use by Gunnison or greater sage-grouse as quickly as possible.
- Reclaim disturbed areas with native grasses, forbs, and shrubs conducive to optimal Gunnison or greater sage-grouse habitat and other wildlife appropriate to the site.
- Use high diversity (10 species or more) reclamation seed mixes in Gunnison or greater sage-grouse habitat.
- Use approved CP-4D (Gunnison or greater sage-grouse) seed mixes, based on soil type, precipitation, and elevation, available from Farm Service Agency, NRCS, or other seed mixes approved by the CDOW.
- Avoid aggressive non-native grasses in Gunnison or greater sage grouse habitat reclamation.
- Reclaim mapped summer habitat with a substantially higher percentage of forbs (> 15% cover post establishment) th

Storm Water/Erosion
Control

North Park Project Area -Stormwater Discharge Permit NO. COR-03E511 in place
Stormwater Management Plan in place and active.

S/AR: SATISFACTORY

Comment:

CA:

Date:

Comment:

Staking:

On Site Inspection (305):

Surface Owner Contact Information:

Name: _____

Address: _____

Phone Number: _____

Cell Phone: _____

Operator Rep. Contact Information:

Landman Name: _____

Phone Number: _____

Date Onsite Request Received: _____

Date of Rule 306 Consultation: _____

Request LGD Attendance: _____

LGD Contact Information:

Name: _____

Phone Number: _____

Agreed to Attend: _____

Inspector Name: Waldron, Emily

Summary of Landowner Issues:

Summary of Operator Response to Landowner Issues:

Onsite Inspection Memorandum Summarizing Discussions at Inspection as Attachment:

Facility

Facility ID: 299110 Type: WELL API Number: 057-06483 Status: PR Insp. Status: PR

Producing Well

Comment:

Environmental

Spills/Releases:

Type of Spill: _____ Description: _____ Estimated Spill Volume: _____

Comment: _____

Corrective Action: _____ Date: _____

Reportable: _____ GPS: Lat _____ Long _____

Proximity to Surface Water: _____ Depth to Ground Water: _____

Water Well:

Lat _____ Long _____

DWR Receipt Num: _____ Owner Name: _____ GPS : _____

Field Parameters:

Sample Location: _____

Emission Control Burner (ECB): _____

Comment: _____

Pilot: _____ Wildlife Protection Devices (fired vessels): _____

Reclamation - Storm Water - Pit

Interim Reclamation:

Date Interim Reclamation Started: _____ Date Interim Reclamation Completed: _____

Land Use: RANGELAND

Comment: _____

1003a. Waste and Debris removed? Pass

CM _____

CA _____ CA Date _____

Unused or unneeded equipment onsite? In

CM _____

CA _____ CA Date _____

Pit, cellars, rat holes and other bores closed? Pass

Inspector Name: Waldron, Emily

CM _____

CA _____ CA Date _____

Guy line anchors marked? Pass

CM _____

CA _____ CA Date _____

1003b. Area no longer in use? Fail Production areas stabilized ? _____

1003c. Compacted areas have been cross ripped? _____

1003d. Drilling pit closed? _____ Subsidence over on drill pit? _____

Cuttings management: _____

1003e. Areas no longer needed for drilling or subsequent operations for have been re-vegetated to 80% of pre-existing? _____

Production areas have been stabilized? _____ Segregated soils have been replaced? _____

RESTORATION AND REVEGETATION

Cropland

Top soil replaced _____ Recontoured _____ Perennial forage re-established _____

Non-Cropland

Top soil replaced _____ Recontoured _____ 80% Revegetation _____

1003 f. Weeds Noxious weeds? _____

Comment: No interim reclamation apparent.

Overall Interim Reclamation In Process

Final Reclamation/ Abandoned Location:

Date Final Reclamation Started: _____ Date Final Reclamation Completed: _____

Final Land Use: RANGELAND

Reminder: _____

Comment: _____

Well plugged _____ Pit mouse/rat holes, cellars backfilled _____

Debris removed _____ No disturbance /Location never built _____

Access Roads Regraded _____ Contoured _____ Culverts removed _____

Gravel removed _____

Location and associated production facilities reclaimed _____ Locations, facilities, roads, recontoured _____

Compaction alleviation _____ Dust and erosion control _____

Non cropland: Revegetated 80% _____ Cropland: perennial forage _____

Weeds present _____ Subsidence _____

Comment: _____

Corrective Action: _____ Date _____

Overall Final Reclamation _____ Well Release on Active Location ☐ Multi-Well Location ☐

Storm Water:

Loc Erosion BMPs	BMP Maintenance	Lease Road Erosion BMPs	Lease BMP Maintenance	Chemical BMPs	Chemical BMP Maintenance	Comment

Inspector Name: Waldron, Emily

S/A/V: SATISFACTOR

Corrective Date: _____

Y

Comment: No apparent soil migration; erosion or soil movement.

CA: _____

Pits: ☐ NO SURFACE INDICATION OF PIT

Attached Documents

You can go to COGCC Images (<https://cogcc.state.co.us/weblink/>) and search by document number:

Document Num	Description	URL
673403187	INSPECTION APPROVED	http://ogccweblink.state.co.us/DownloadDocumentPDF.aspx?DocumentId=3866923
673403200	Inspection Photos	http://ogccweblink.state.co.us/DownloadDocumentPDF.aspx?DocumentId=3866908