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# RECLAMATION MONITORING REPORT

ALOHA MULA #6  
LINCOLN COUNTY, COLORADO

OCTOBER 2016

Prepared for:

WIEPKING-FULLERTON ENERGY, L.L.C.  
Englewood, Colorado



# **RECLAMATION MONITORING REPORT**

**ALOHA MULA #6  
LINCOLN COUNTY, COLORADO**

**OCTOBER 2016**

**Prepared for:**

**WIEPKING-FULLERTON ENERGY, L.L.C.  
4600 South Downing Street  
Englewood, Colorado 80113**

**Prepared by:**

**LT ENVIRONMENTAL, INC.  
4600 West 60<sup>th</sup> Avenue  
Arvada, Colorado 80003  
(303) 433-9788**



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## 1.0 INTRODUCTION

LT Environmental, Inc. (LTE) has been retained by Wiepking-Fullerton Energy, L.L.C. (Wiepking-Fullerton) to provide this Reclamation Monitoring Report for the Aloha Mula #6 (Site) located in Lincoln County, Colorado. The purpose of this Reclamation Monitoring Report is to achieve compliance with the approved Colorado Oil and Gas Conservation Commission (COGCC) Form 27 (Document No.: 2099820, Remediation No.: 9514) Conditions of Approval (COA) by providing details regarding the reclamation work completed and conducting reclamation monitoring of the vegetation on the Site.



## 2.0 CONDITIONS OF APPROVAL

Per COGCC Form 27 (Document No.: 2099820), the requirements as stated in the COA to obtain compliance include the following.

1. Submit an annual report documenting reclamation work completed and the status of vegetation no later than October 31st of each year to include the following information:

Total volume of any amendments or fertilizer applied and the application rate per acre;

Seed mixture and application rate;

Site photographs depicting the work completed including erosion controls and seeding;

Site photographs depicting the condition of the vegetation during the growing season;

Copies of the scheduled bi-annual monitoring inspection forms referenced in Section 2.6.5 of the Form 27 Attachment; and

Future plans for additional amendments and seeding as needed based on success of the seeding completed in Spring 2016.

2. Comply with COGCC Rule 1002.f. *Stormwater Management* throughout the duration of the project.

Conduct and document stormwater inspections after any storm event that results in runoff; and

Verify that stormwater controls are properly maintained or replaced as needed throughout the duration of the project.

3. Control noxious weeds throughout the reclamation process. Weed control measures will be conducted in compliance with the Colorado Noxious Weed Act C.R.S. §35-5.5-115.
4. If the location is currently used for cattle grazing or will be used during the project, the operator is required to install fencing as needed to protect the reclamation area from damage until vegetation can be established.
5. All required work to complete the planned reclamation will be conducted no later than May 31, 2016.
6. The reclamation project will meet closure criteria when all affected areas have a uniform vegetative cover that reflects pre-disturbance area forbs, shrubs, and grasses with total percent plant cover of at least eighty percent (80%) of pre-disturbance levels, excluding noxious weeds.
7. The operator will obtain written approval from the Land Owner accepting final reclamation prior to closure of this project. The written approval will be submitted with the final closure request after closure criteria has been satisfied and all stormwater management controls have been removed.
8. COGCC staff will conduct a final inspection to verify that the closure criteria have been satisfied after receiving the closure request.



### **3.0 RECLAMATION WORK COMPLETED**

#### **3.1 RECLAMATION METHODS**

Reclamation activities were completed by Halde Sand & Gravel, Inc. on March 9, 2016, per the approved Remediation and Reclamation Workplan which was submitted with the COGCC Form 27 referenced in Section 1 of this report.

##### **3.1.1 Soil Compact Alleviation**

Soil compaction was alleviated as required by COGCC Rule 1003.c. via cross-ripping techniques to a depth of 18 inches below ground surface (bgs) utilizing a bulldozer.

##### **3.1.2 Seeding and Fertilizer Amendments**

After soil compaction alleviation activities were completed, the top soil was disked using a tractor to prepare the seed bed. The water-based bentonitic drilling fluids and/or associated cuttings were incorporated into native soil during the compaction alleviation and seed bed preparation activities. The Natural Resource Conservation Service (NRCS)-recommended seed mix was applied at the suggested rate of 9.3 Pure Live Seed pounds per acre at a depth of one-quarter to one-half of an inch bgs utilizing a tractor equipped with drill seeding equipment. Additionally, an all-terrain vehicle was used to spread potash fertilizer, at a rate of 50 pounds per acre over the seeded area as a soil amendment

##### **3.1.3 Erosion Control, Site Security, and Stormwater Inspections**

After the Site was drill seeded, straw mulch was then spread across the Site at a rate of approximately 2,000-4,000 pounds per acre and crimped into the soil to assist in stabilization from potential erosion and a barbed wire fence was constructed around the area to prevent livestock grazing.

Stormwater inspections were conducted per COGCC Rule 1002.f. to evaluate structural best management practices (BMPs) implemented at the Site and to document repairs made.

Appendix A includes the invoices of the work completed, the seed mix used, and a photographic log of the Site. Completed stormwater inspection forms are attached as Appendix B.

##### **3.1.4 Weed Control**

Halde Sand and Gravel, Inc. mowed the Site as a weed control method on July 19, 2016, as recommended by the regional NRCS office. Chemical weed control was not recommended during the first growing season after planting. Invoices for the mowing operations are included as Appendix A.



## 4.0 RECLAMATION MONITORING

Scheduled bi-annual reclamation monitoring was conducted on May 20, 2016, and September 8, 2016. Reclamation monitoring included collecting qualitative and quantitative data for the Site.

### 4.1 MONITORING METHODS

#### 4.1.1 Qualitative Data

Qualitative data included the visual observations of general site conditions and photographic documentation conducted during reclamation monitoring events.

##### 4.1.1.1 General Site Conditions

Qualitative inspections evaluate the erosion potential, the overall plant community vigor and diversity, and the general conditions of the Site, such as disturbances present or any other notable conditions needing corrections. Plant species on- and off-site were identified.

##### 4.1.1.2 Photographic Documentation

Photographic documentation provides a visual qualitative method for monitoring vegetation changes. Photographs of the groundcover were collected facing the four cardinal directions representing vegetation conditions on and off of the Site. The photographs provide information for the Site regarding wildlife habitat, rangeland quality, and plant population conditions. Features like weed invasion, disturbances, plant height, and plant vigor can also be identified in the photographs.

#### 4.1.2 Quantitative Data

Quantitative data were collected using the line-point intercept method at locations that were determined to be representative of the plant communities present at the time of the reclamation inspection. For the first reclamation monitoring event, the standard 100 point line-point intercept method was reduced because visual observation indicated far less than 80% vegetative density as plants had only recently started germinating. Data were recorded at 20-foot intervals over each 100-foot transect and recorded species, plant litter, rock, and bare ground densities. For the second reclamation monitoring event of the year, data were recorded using the line-point intercept method at 1-foot intervals over each 100-foot transect. The transect locations on and off of the Site were selected based on the applicable NRCS Ecological Site Description (ESD).

### 4.2 MONITORING RESULTS

Qualitative and quantitative data were collected on May 20, 2016, and on September 8, 2016. The site-specific reclamation inspection forms are presented as Appendix C and include the inspection summaries and photographs.

During the monitoring event on May 20, 2016, just two months after the March reclamation seeding event, the onsite vegetative cover was observed to be less than 80 percent (%) of the

referenced offsite vegetation. During the monitoring event on September 8, 2016, the vegetative covers at the Site was still observed to be less than 80%, but had filled in slightly relative to the previous May 2016 monitoring event.



## **5.0 PLANS FOR CONTINUED OR ADDITIONAL ACTION ITEMS**

### **5.1 WEED CONTROL**

Weed control will be continued with additional mowing operations prior to seed set in the subsequent growing seasons, as needed. Chemical controls may be utilized after the first growing season.

### **5.2 RECLAMATION MONITORING AND STORMWATER INSPECTIONS**

Bi-annual monitoring of the vegetation will occur until the vegetation cover is 80% of the pre-disturbance or reference area and all reclamation objectives have been met. Post-construction stormwater inspections will be conducted pursuant to COGCC Rule 1002.f, and corrective actions related to vegetation as well as stormwater compliance will be implemented, as needed.

### **5.3 LAND OWNER ACCEPTANCE**

When final reclamation of the area has been completed, a letter of acceptance regarding final reclamation will be provided to the land owner prior to closure of the project. The written approval shall be submitted with the final closure request.

### **5.4 FINAL CLOSURE REQUEST**

A final closure request will be submitted with the required documentation. COGCC staff will then perform a final inspection to verify that the closure criteria have been satisfied.

## FIGURES



**APPENDIX A**  
**RECLAMATION WORK INVOICES**



Halde Sand & Gravel Inc.

46321 US Hwy 24  
Burlington, CO 80807

# Invoice

Invoice Date	Invoice #
3/29/2016	52455

Bill To
Wiepking-Fullerton Energy, LLC c/o Linda Boone 8762 East 29th Place Denver, CO 80238

Lease Name
#6 Aloha

Terms
Net 30

Qty	Item	Description	Rate	Serviced	Ticket #	Amount
1	Dozer W Oper	Dozer-Ripped deep and cross ripped; Tractor-Disk for seed bed, seed grass, spread straw, crimped in; 4-wheeler-- spread pot ash fertilizer and build fence	1,250.00	3/9/2016		1,250.00

Thank you for your business.

<b>Subtotal</b>	\$1,250.00
<b>Sales Tax (0.0%)</b>	\$0.00
<b>Total</b>	\$1,250.00

Phone #	Fax #	E-mail
719-346-0352	719-346-8945	haldesand@centurytel.net

**Halde Sand & Gravel, Inc.**  
46321 Hwy 24 • Burlington, CO 80807

COMPANY Wieseking DATE: 3/9/16 JOB NO. \_\_\_\_\_

LEASE NAME: #6 Alona

JOB LOCATION: \_\_\_\_\_

QUANTITY	DESCRIPTION
1	Dozer- Ripped deep and cross ripped Tractor-disk for seed bed, seed grass, - Spread straw, crimped in 4wheeler- spread pot ash fertilizer and build fence

Original

Thank You

**ALOHA #6 1 ACRE MIX  
LOT #: G-160276**

Mixture/Variety :	Purity %	Germ%	Origin:
SAND BLUESTEM, CHET	25.37	97	KS
SIDEOATS GRAMA, VAUGHN	23.97	63	KS
YELLOW INDIANGRASS, CHEYENNE	18.02	97	KS
PRAIRIE SANDREED, GOSHEN	11.32	92	MT
SWITCHGRASS, BLACKWELL	05.76	95	KS
YELLOW BL. SWEET CLOVER, VNS	03.84	93	CAN

**Crop: 0.42% Inert: 11.26% Weeds: 0.04% Net Wt. 13.0#**

Noxious Weeds: NONE FOUND

Tested: NOV 2015

**CUSTOM MIX FOR HALDE SAND AND GRAVEL  
EACH 13 LB BAG COVERS APPROX. 1 ACRE**

Sharp Bros. Seed Co. Greeley, CO 80631 (970) 356-4710

# Halde Sand & Gravel, Inc.

46321 Hwy 24 • Burlington, CO 80807

COMPANY: Wierking Fellows DATE: 7-19-16 JOB NO. \_\_\_\_\_

LEASE NAME: Great Plains Field

JOB LOCATION: Mowed Tilled Sig. L<sup>ts</sup>.

QUANTITY	DESCRIPTION
1	Aloha # 3 9:15 - 9:43
2	Ferristal # 5 9:49 - 10:10 21-30
3	Ferristal 10:10 - 10:26 22-30
4	Aloha # 16 10:30 - 10:57 <del>Aloha # 2</del>
5	Bigwampun # 10 11:03 - 12 noon
6	MAHALO # 2 1:45 - 2:15
7	Kerry # 2 2:15 - 2:55
8	Aloha # 6 3 - 3:33
9	NAPALI # 4 3:33 - 4:15
10	Bubba STATE # 3 4:16 - 4:46
Tractor & Mower - <i>Sh</i>	

*Sh*  
90  
#720

Original

Thank You



Photographs Taken: 03/22/2016

Aloha Mula 6 – Reclamation Work Completed


**Photographic Log**

**APPENDIX B**  
**STORMWATER MANAGEMENT INSPECTION RECORDS**



# Stormwater Management Plan Compliance Inspection Form

SiteID/Name: COG-06389 / Aloha Mula 6 COGCC  
 Location: Sec 19 T10S R55W

Inspection Date: 3/28/2016  
 Inspector: Drew Stormo  
 Signature: 

Inspection Type: 14-day/72 hour Storm Event  
 Land Use: Pasture/Grassland/Range  
 SiteType: Jetted Location

InspectorTitle:

Phase: Interim

Receiving Body of water/Distance/Direction: Big Sandy Creek 1.5 miles NE

Prior Veg Cover (%): 70% Current Weather: sunny 60

Stormwater Runoff Risk: Low

In the past 24 hours, has there been overland runoff due to a storm event that caused sediment movement? No

## Best Management Practice (BMP) Checklist

BMP TYPE					
BMP	In Use Y/N	Req'd Y/N	Required Action or Maintenance	Location	Done
Mulching	Yes	Yes			
Seeding	Yes	Yes			

GENERAL CONDITIONS		
General	Y/N/NA	Comments
Have repairs/additional BMP issues been addressed since last inspection?	NA	
Are there signs of sediment leaving the site?	No	
Are there signs of offsite tracking at access point?	No	
Are surface waters being impacted by site runoff?	No	
Have simple repairs been made today at this site by the Inspector?	NA	
Pad Area Observations	Y/N/NA	Comments
Are tanks and/or drums present?	No	
Are tanks and/or drums placed in secondary containment areas?	NA	
Is pad area stabilized road base material?	No	
Is access road graveled (offsite soil tracking control)?	No	
Vegetation Checklist (Erosion Reduction Control)	Y/N/NA	Comments
Has the site achieved 70% or prior vegetation coverage for stabilization?	No	regrowth is beginning
Is the pad area reseeded?	Yes	
Are there signs of vegetation regrowth?	Yes	
Is reseeding needed?	No	

Comments: small regrowth occuring, noxious weeds and cattle fence are compliant per COGCC stipulations

### Compliance Status:

If checked Yes, this site is in compliance with the Permit and had no incidents requiring corrective action at the time of the inspection.

Yes  No

### Certification

All required corrective actions have been completed, and this site is in compliance with the permit to the best of the signer's knowledge and belief.

Certifier Signature: 


Date: 3/28/2016

Certified by: Drew Stormo

Certifier Title: Staff Biologist

# Stormwater Management Plan Compliance Inspection Form

SiteID/Name: COG-06389 / Aloha Mula 6 COGCC  
 Location: Sec 19 T10S R55W

Inspection Date: 4/12/2016  
 Inspector: Drew Stormo  
 Signature: 

Inspection Type: 14-day/72 hour Storm Event  
 Land Use: Pasture/Grassland/Range  
 SiteType: Jetted Location

InspectorTitle: Staff Scientist

Phase: Interim

Receiving Body of water/Distance/Direction: Big Sandy Creek 1.5 miles NE

Prior Veg Cover (%): 70% Current Weather: 57 degrees sunny

Stormwater Runoff Risk: Low

In the past 24 hours, has there been overland runoff due to a storm event that caused sediment movement? No

## Best Management Practice (BMP) Checklist

BMP TYPE					
BMP	In Use Y/N	Req'd Y/N	Required Action or Maintenance	Location	Done
Mulching	Yes	Yes			
Seeding	Yes	Yes			

GENERAL CONDITIONS		
General	Y/N/NA	Comments
Have repairs/additional BMP issues been addressed since last inspection?	NA	
Are there signs of sediment leaving the site?	No	
Are there signs of offsite tracking at access point?	No	
Are surface waters being impacted by site runoff?	No	
Have simple repairs been made today at this site by the Inspector?	NA	
Pad Area Observations	Y/N/NA	Comments
Are tanks and/or drums present?	No	
Are tanks and/or drums placed in secondary containment areas?	NA	
Is pad area stabilized road base material?	No	
Is access road graveled (offsite soil tracking control)?	No	
Vegetation Checklist (Erosion Reduction Control)	Y/N/NA	Comments
Has the site achieved 70% or prior vegetation coverage for stabilization?	No	
Is the pad area reseeded?	Yes	
Are there signs of vegetation regrowth?	Yes	grass has begun to sprout
Is reseeding needed?	No	

Comments: grass has begun to sprout. Monitor weeds, weeds offsite may try to move onsite. Noxious weeds and cattle fence compliant per COGCC stipulations. Rain event 4/10/16


### Compliance Status:

If checked Yes, this site is in compliance with the Permit and had no incidents requiring corrective action at the time of the inspection.

Yes  No

### Certification

All required corrective actions have been completed, and this site is in compliance with the permit to the best of the signer's knowledge and belief.

Certifier  
Signature: 


Date: 4/12/2016

Certified by: Drew Stormo

Certifier Title: Staff Scientist

# Stormwater Management Plan Compliance Inspection Form

SiteID/Name: COG-06389 / Aloha Mula 6 COGCC  
 Location: Sec 19 T10S R55W

Inspection Date: 4/21/2016  
 Inspector: Drew Stormo  
 Signature: 

Inspection Type: 14-day/72 hour Storm Event  
 Land Use: Pasture/Grassland/Range  
 SiteType: Jetted Location

InspectorTitle: Staff Scientist

Phase: Interim

Receiving Body of water/Distance/Direction: Big Sandy Creek 1.5 miles NE

Prior Veg Cover (%): 70% Current Weather: 56 Sunny

Stormwater Runoff Risk: Low

In the past 24 hours, has there been overland runoff due to a storm event that caused sediment movement? No

## Best Management Practice (BMP) Checklist

BMP TYPE					
BMP	In Use Y/N	Req'd Y/N	Required Action or Maintenance	Location	Done
Mulching	Yes	Yes			
Seeding	Yes	Yes			

### GENERAL CONDITIONS

General	Y/N/NA	Comments
Have repairs/additional BMP issues been addressed since last inspection?	NA	
Are there signs of sediment leaving the site?	No	
Are there signs of offsite tracking at access point?	No	
Are surface waters being impacted by site runoff?	No	
Have simple repairs been made today at this site by the Inspector?	NA	
Pad Area Observations	Y/N/NA	Comments
Are tanks and/or drums present?	No	
Are tanks and/or drums placed in secondary containment areas?	NA	
Is pad area stabilized road base material?	No	
Is access road graveled (offsite soil tracking control)?	No	
Vegetation Checklist (Erosion Reduction Control)	Y/N/NA	Comments
Has the site achieved 70% or prior vegetation coverage for stabilization?	No	
Is the pad area reseeded?	Yes	
Are there signs of vegetation regrowth?	Yes	
Is reseeding needed?	No	

Comments: grass has begun to fill in. Monitor weeds. Noxious weeds and cattle fence compliant per COGCC stipulations. Storm event ended 4/18/16

### Compliance Status:

If checked Yes, this site is in compliance with the Permit and had no incidents requiring corrective action at the time of the inspection.

Yes  No

### Certification

All required corrective actions have been completed, and this site is in compliance with the permit to the best of the signer's knowledge and belief.

Certifier Signature: 


Date: 4/21/2016

Certified by: Drew Stormo

Certifier Title: Staff Scientist

# Stormwater Management Plan Compliance Inspection Form

SiteID/Name: COG-06389 / Aloha Mula 6 COGCC  
 Location: Sec 19 T10S R55W

Inspection Date: 5/3/2016  
 Inspector: Drew Stormo  
 Signature: 

Inspection Type: COGCC COA Storm Event  
 Land Use: Pasture/Grassland/Range  
 SiteType: Jetted Location

InspectorTitle: Staff Scientist

Phase: Interim

Receiving Body of water/Distance/Direction: Big Sandy Creek 1.5 miles NE

Prior Veg Cover (%): 70% Current Weather: 56F, windy

Stormwater Runoff Risk: Low

In the past 24 hours, has there been overland runoff due to a storm event that caused sediment movement? No

## Best Management Practice (BMP) Checklist

BMP TYPE					
BMP	In Use Y/N	Req'd Y/N	Required Action or Maintenance	Location	Done
Mulching	Yes	Yes			
Seeding	Yes	Yes			

### GENERAL CONDITIONS

General	Y/N/NA	Comments
Have repairs/additional BMP issues been addressed since last inspection?	NA	
Are there signs of sediment leaving the site?	No	
Are there signs of offsite tracking at access point?	No	
Are surface waters being impacted by site runoff?	No	
Have simple repairs been made today at this site by the Inspector?	NA	
Pad Area Observations	Y/N/NA	Comments
Are tanks and/or drums present?	No	
Are tanks and/or drums placed in secondary containment areas?	NA	
Is pad area stabilized road base material?	No	
Is access road graveled (offsite soil tracking control)?	No	
Vegetation Checklist (Erosion Reduction Control)	Y/N/NA	Comments
Has the site achieved 70% or prior vegetation coverage for stabilization?	No	
Is the pad area reseeded?	Yes	
Are there signs of vegetation regrowth?	Yes	
Is reseeding needed?	No	

Comments: Vegetation is continuing to fill in. Monitor weeds. Noxious weeds and cattle fence compliant per COGCC stipulations. Storm event 4/29/16-5/1/16 with total precipitation of 1.40".

### Compliance Status:

If checked Yes, this site is in compliance with the Permit and had no incidents requiring corrective action at the time of the inspection.

Yes  No

### Certification

All required corrective actions have been completed, and this site is in compliance with the permit to the best of the signer's knowledge and belief.

Certifier  
Signature: 


Date: 5/3/2016

Certified by: Drew Stormo

Certifier Title: Staff Scientist

# Stormwater Management Plan Compliance Inspection Form

SiteID/Name: COG-06389 / Aloha Mula 6 COGCC  
 Location: Sec 19 T10S R55W

Inspection Date: 5/20/2016  
 Inspector: Drew Stormo  
 Signature: 

Inspection Type: COGCC COA SemiAnnual  
 Land Use: Pasture/Grassland/Range  
 SiteType: Jetted Location

InspectorTitle: Staff Scientist

Phase: Interim

Receiving Body of water/Distance/Direction: Big Sandy Creek 1.5 miles NE

Prior Veg Cover (%): 70% Current Weather: 68F, sunny.

Stormwater Runoff Risk: Low

In the past 24 hours, has there been overland runoff due to a storm event that caused sediment movement? No

## Best Management Practice (BMP) Checklist

BMP TYPE					
BMP	In Use Y/N	Req'd Y/N	Required Action or Maintenance	Location	Done
Mulching	Yes	Yes			
Seeding	Yes	Yes			

### GENERAL CONDITIONS

General	Y/N/NA	Comments
Have repairs/additional BMP issues been addressed since last inspection?	NA	
Are there signs of sediment leaving the site?	No	
Are there signs of offsite tracking at access point?	No	
Are surface waters being impacted by site runoff?	No	
Have simple repairs been made today at this site by the Inspector?	NA	
Pad Area Observations	Y/N/NA	Comments
Are tanks and/or drums present?	No	
Are tanks and/or drums placed in secondary containment areas?	NA	
Is pad area stabilized road base material?	No	
Is access road graveled (offsite soil tracking control)?	No	
Vegetation Checklist (Erosion Reduction Control)	Y/N/NA	Comments
Has the site achieved 70% or prior vegetation coverage for stabilization?	No	
Is the pad area reseeded?	Yes	
Are there signs of vegetation regrowth?	Yes	
Is reseeding needed?	No	

Comments: Vegetation is continuing to fill in. Vegetation is about 30-40% cover. Monitor weeds. Noxious weeds and cattle fence compliant per COGCC stipulations. 72hr storm event inspection.


### Compliance Status:

If checked Yes, this site is in compliance with the Permit and had no incidents requiring corrective action at the time of the inspection.

Yes  No

### Certification

All required corrective actions have been completed, and this site is in compliance with the permit to the best of the signer's knowledge and belief.

Certifier Signature: 

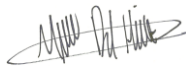
Date: 5/20/2016

Certified by: Drew Stormo

Certifier Title: Staff Scientist

# Stormwater Management Plan Compliance Inspection Form

SiteID/Name: COG-06389 / Aloha Mula 6 COGCC  
 Location: Sec 19 T10S R55W

Inspection Date: 6/1/2016  
 Inspector: Marcus Del Hierro  
 Signature:   
 InspectorTitle: Staff Engineer Intern

Inspection Type: COGCC COA Storm Event  
 Land Use: Pasture/Grassland/Range  
 SiteType: Jetted Location  
 Phase: Interim

Receiving Body of water/Distance/Direction: Big Sandy Creek 1.5 miles NE

Prior Veg Cover (%): 70% Current Weather: 70's, cloudy.

Stormwater Runoff Risk: Low

In the past 24 hours, has there been overland runoff due to a storm event that caused sediment movement? No

## Best Management Practice (BMP) Checklist

BMP TYPE					
BMP	In Use Y/N	Req'd Y/N	Required Action or Maintenance	Location	Done
Mulching	Yes	Yes			
Seeding	Yes	Yes			

### GENERAL CONDITIONS

General	Y/N/NA	Comments
Have repairs/additional BMP issues been addressed since last inspection?	NA	
Are there signs of sediment leaving the site?	No	
Are there signs of offsite tracking at access point?	No	
Are surface waters being impacted by site runoff?	No	
Have simple repairs been made today at this site by the Inspector?	NA	
Pad Area Observations	Y/N/NA	Comments
Are tanks and/or drums present?	No	
Are tanks and/or drums placed in secondary containment areas?	NA	
Is pad area stabilized road base material?	No	
Is access road graveled (offsite soil tracking control)?	No	
Vegetation Checklist (Erosion Reduction Control)	Y/N/NA	Comments
Has the site achieved 70% or prior vegetation coverage for stabilization?	No	
Is the pad area reseeded?	Yes	
Are there signs of vegetation regrowth?	Yes	
Is reseeded needed?	No	

Comments: Vegetation is continuing to fill in. Vegetation is about 30-40% cover. Monitor weeds. Noxious weeds and cattle fence compliant per COGCC stipulations. COGCC storm event inspection.

### Compliance Status:

If checked Yes, this site is in compliance with the Permit and had no incidents requiring corrective action at the time of the inspection.

Yes  No

### Certification

All required corrective actions have been completed, and this site is in compliance with the permit to the best of the signer's knowledge and belief.

Certifier Signature: 


Date: 6/1/2016

Certified by: Marcus Del Hierro

Certifier Title: Staff Engineer Intern

# Stormwater Management Plan Compliance Inspection Form

SiteID/Name: COG-06389 / Aloha Mula 6 COGCC  
 Location: Sec 19 T10S R55W

Inspection Date: 7/6/2016  
 Inspector: Drew Stormo  
 Signature: 

Inspection Type: COGCC COA Storm Event  
 Land Use: Pasture/Grassland/Range  
 SiteType: Jetted Location

InspectorTitle: Staff Scientist

Phase: Interim

Receiving Body of water/Distance/Direction: Big Sandy Creek 1.5 miles NE

Prior Veg Cover (%): 70% Current Weather: 88F, sunny.

Stormwater Runoff Risk: Low

In the past 24 hours, has there been overland runoff due to a storm event that caused sediment movement? No

## Best Management Practice (BMP) Checklist

BMP TYPE					
BMP	In Use Y/N	Req'd Y/N	Required Action or Maintenance	Location	Done
Mulching	Yes	Yes			
Seeding	Yes	Yes			

GENERAL CONDITIONS		
General	Y/N/NA	Comments
Have repairs/additional BMP issues been addressed since last inspection?	NA	
Are there signs of sediment leaving the site?	No	
Are there signs of offsite tracking at access point?	No	
Are surface waters being impacted by site runoff?	No	
Have simple repairs been made today at this site by the Inspector?	NA	
Pad Area Observations	Y/N/NA	Comments
Are tanks and/or drums present?	No	
Are tanks and/or drums placed in secondary containment areas?	NA	
Is pad area stabilized road base material?	No	
Is access road graveled (offsite soil tracking control)?	No	
Vegetation Checklist (Erosion Reduction Control)	Y/N/NA	Comments
Has the site achieved 70% or prior vegetation coverage for stabilization?	No	
Is the pad area reseeded?	Yes	
Are there signs of vegetation regrowth?	Yes	
Is reseeded needed?	No	

Comments: Vegetation very patchy especially on SW side. Monitor weeds. 72hr storm event inspection with total precipitation of .89"

### Compliance Status:

If checked Yes, this site is in compliance with the Permit and had no incidents requiring corrective action at the time of the inspection.

Yes  No

### Certification

All required corrective actions have been completed, and this site is in compliance with the permit to the best of the signer's knowledge and belief.

Certifier Signature: 


Date: 7/6/2016

Certified by: Drew Stormo

Certifier Title: Staff Scientist

# Stormwater Management Plan Compliance Inspection Form

SiteID/Name: COG-06389 / Aloha Mula 6 COGCC  
 Location: Sec 19 T10S R55W

Inspection Date: 8/1/2016  
 Inspector: Drew Stormo  
 Signature: 

Inspection Type: COGCC COA Storm Event  
 Land Use: Pasture/Grassland/Range  
 SiteType: Jetted Location

InspectorTitle: Staff Scientist

Phase: Interim

Receiving Body of water/Distance/Direction: Big Sandy Creek 1.5 miles NE

Prior Veg Cover (%): 70% Current Weather: 88F, sunny.

Stormwater Runoff Risk: Low

In the past 24 hours, has there been overland runoff due to a storm event that caused sediment movement? No

## Best Management Practice (BMP) Checklist

BMP TYPE					
BMP	In Use Y/N	Req'd Y/N	Required Action or Maintenance	Location	Done
Mulching	Yes	Yes			
Seeding	Yes	Yes			

### GENERAL CONDITIONS

General	Y/N/NA	Comments
Have repairs/additional BMP issues been addressed since last inspection?	NA	
Are there signs of sediment leaving the site?	No	
Are there signs of offsite tracking at access point?	No	
Are surface waters being impacted by site runoff?	No	
Have simple repairs been made today at this site by the Inspector?	NA	
Pad Area Observations	Y/N/NA	Comments
Are tanks and/or drums present?	No	
Are tanks and/or drums placed in secondary containment areas?	NA	
Is pad area stabilized road base material?	No	
Is access road graveled (offsite soil tracking control)?	No	
Vegetation Checklist (Erosion Reduction Control)	Y/N/NA	Comments
Has the site achieved 70% or prior vegetation coverage for stabilization?	No	
Is the pad area reseeded?	Yes	
Are there signs of vegetation regrowth?	Yes	
Is reseeded needed?	No	

Comments: Vegetation around 50%, site recently mowed. Large bare spot near SW side of area. 72hr storm event with total precipitation of .50".

### Compliance Status:

If checked Yes, this site is in compliance with the Permit and had no incidents requiring corrective action at the time of the inspection.

Yes  No

### Certification

All required corrective actions have been completed, and this site is in compliance with the permit to the best of the signer's knowledge and belief.

Certifier Signature: 


Date: 8/1/2016

Certified by: Drew Stormo

Certifier Title: Staff Scientist

# Stormwater Management Plan Compliance Inspection Form

SiteID/Name: COG-06389 / Aloha Mula 6 COGCC  
 Location: Sec 19 T10S R55W

Inspection Date: 9/8/2016  
 Inspector: Jillian Sanders  
 Signature: 

Inspection Type: COGCC COA SemiAnnual  
 Land Use: Pasture/Grassland/Range  
 SiteType: Jetted Location

InspectorTitle: Staff Scientist

Phase: Interim

Receiving Body of water/Distance/Direction: Big Sandy Creek 1.5 miles NE

Prior Veg Cover (%): 70% Current Weather: sunny 80s

Stormwater Runoff Risk: Low

In the past 24 hours, has there been overland runoff due to a storm event that caused sediment movement? No

## Best Management Practice (BMP) Checklist

BMP TYPE					
BMP	In Use Y/N	Req'd Y/N	Required Action or Maintenance	Location	Done
Mulching	Yes	Yes			
Seeding	Yes	Yes			

### GENERAL CONDITIONS

General	Y/N/NA	Comments
Have repairs/additional BMP issues been addressed since last inspection?	NA	
Are there signs of sediment leaving the site?	No	
Are there signs of offsite tracking at access point?	No	
Are surface waters being impacted by site runoff?	No	
Have simple repairs been made today at this site by the Inspector?	NA	
Pad Area Observations	Y/N/NA	Comments
Are tanks and/or drums present?	No	
Are tanks and/or drums placed in secondary containment areas?	NA	
Is pad area stabilized road base material?	No	
Is access road graveled (offsite soil tracking control)?	No	
Vegetation Checklist (Erosion Reduction Control)	Y/N/NA	Comments
Has the site achieved 70% or prior vegetation coverage for stabilization?	No	
Is the pad area reseeded?	Yes	
Are there signs of vegetation regrowth?	Yes	
Is reseeding needed?	No	

Comments: Conducted 2nd semi-annual line-point intercept measurement for vegetation growth. Site is showing signs of improvement. Rain on 8/31, no signs of erosion.

### Compliance Status:

If checked Yes, this site is in compliance with the Permit and had no incidents requiring corrective action at the time of the inspection.

Yes  No

### Certification

All required corrective actions have been completed, and this site is in compliance with the permit to the best of the signer's knowledge and belief.

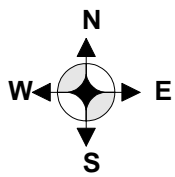
Certifier Signature: 

Date: 9/8/2016

Certified by: Jillian Sanders

Certifier Title: Staff Scientist

WELL NAME:	Aloha Mula 6				API#:	COG-06389		
	QTR/QTR:	SWNE	SEC:	19	TWN:	10S	RNG:	55W
LAT/LONG:	39.16595/-103.59198							
DIRECTIONS:								
Hwy 40 & CR 26 S, 2.6, W.35 into								
MUNICIPALITY:								
Lincoln								
PRE-CONSTRUCTION VEGETATION DESCRIPTION AND COVERAGE PERCENT:								
Rangeland 70%								
TOPOGRAPHY:								
3-20% slopes								
TOTAL DISTURBED AREA (acres):								
0.62								
SOIL TYPE'								
Valent Sand								
NEAREST RECEIVING WATERS								
NAME	Big Sandy Creek							
DIRECTION	Northeast							
DISTANCE	1.5 miles							
NON-STORMWATER DISCHARGE								
NAME								
DIRECTION								
DISTANCE								
POTENTIAL DRAINAGE AREA								
NAME								
DIRECTION								
DISTANCE								
MAP GENERATED BY				LT ENVRONMENTAL				
SITE CONSTRUCTION COMPANY								
LANDMAN REPRESENTATIVE				KERRY HALDE				
COMMENTS								

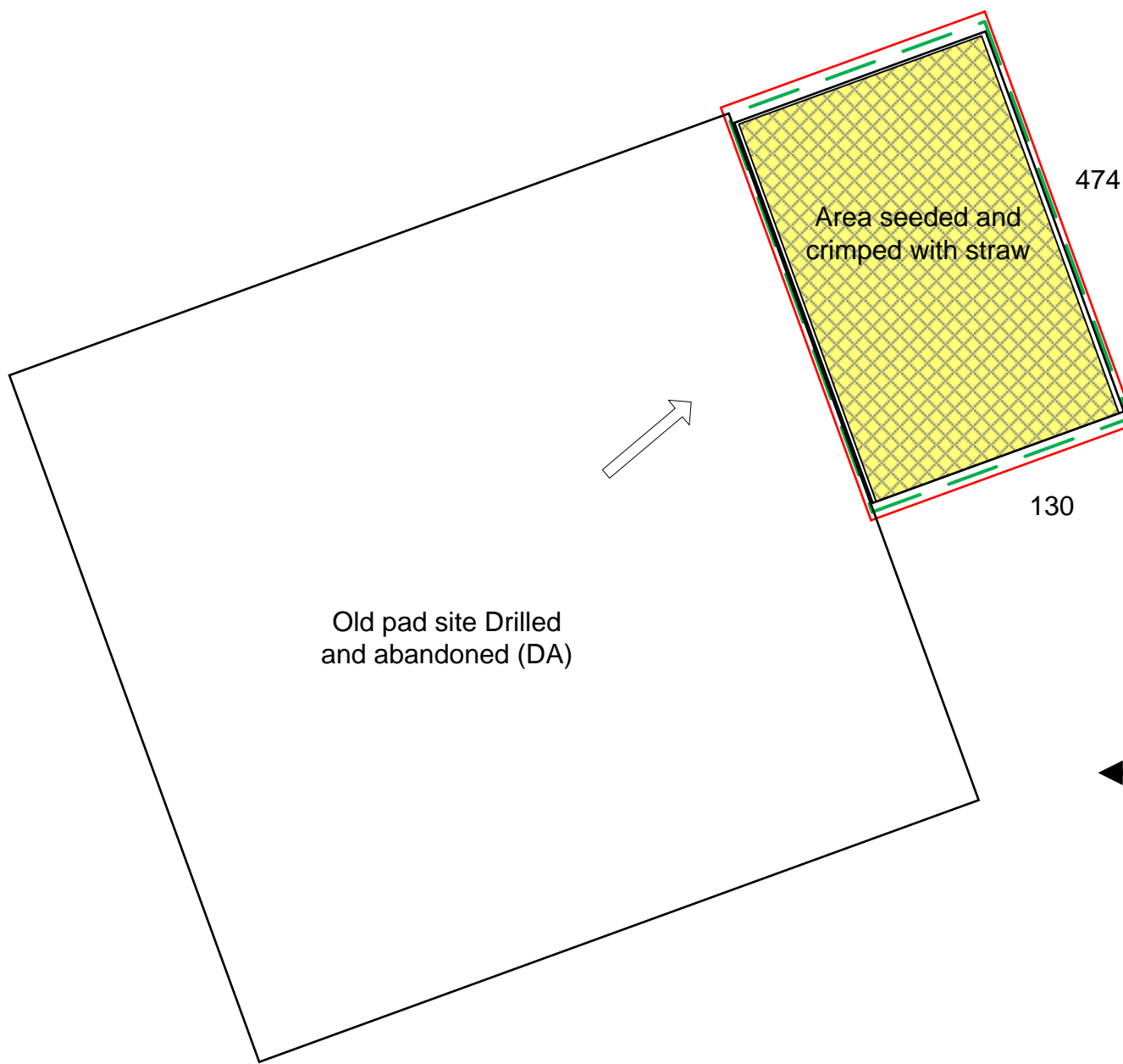


Lease/Name: Aloha Mula 6  
 Land Use: Rangeland  
 Runoff Risk: Low

API: COG-06389 SEC: 19 TWN: 10S RNG: 55W  
 Lat/Long: 39.16595/-103.59198  
 County: Lincoln

Permittee:  
 Wiepking-Fullerton  
 Energy, LLC

Inspection Date:  
 3/28/16



Satellite Map: Courtesy of Google Earth



**LEGEND**

<b>Construction Boundary</b>	<b>Wellhead</b>	<b>Ditch</b>
<b>Disturbance Boundary</b>	<b>Rig</b>	<b>Ditch &amp; Berm</b>
<b>Cut/Fill Line</b>	<b>Stock Pile</b>	<b>Erosion Control Blanket</b>
<b>Chemical Storage</b>	<b>Rolloff Frac Tank</b>	<b>Filter Berm</b>
<b>Port-o-let</b>	<b>Frac Trailer</b>	<b>Hydro-mulch</b>
<b>Roadbased Surface</b>	<b>Equipment Storage</b>	<b>Mulching</b>
<b>Surface Water</b>	<b>Trailer</b>	<b>Ripping</b>
<b>Paved Road</b>	<b>Surface Flow</b>	<b>Riprap</b>
<b>Unpaved Road</b>	<b>Vehicle Tracking Control</b>	<b>Sediment Trap</b>
<b>Meter House</b>	<b>Cattleguard</b>	<b>Seeding</b>
<b>Flare</b>	<b>Dumpster</b>	<b>Silt Fence</b>
<b>AST</b>	<b>Berm</b>	<b>Sound Barrier</b>
<b>Water Sump</b>	<b>Check Dam</b>	<b>Straw Bale</b>
<b>Separator</b>	<b>Culvert</b>	<b>Soil Roughening</b>
		<b>Wattle</b>

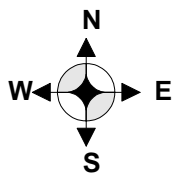
Topographic Map: Courtesy of Google Earth



- 1) Construction site boundaries include all ground surface disturbances and approximately 10-15 feet beyond perimeter BMPs. Boundaries are subject to change at any time for pad expansion, maintenance and addition of BMP structures, or new access roads.
- 2) Surrounding conditions include rangeland vegetation with pre-disturbance vegetation density approximately 70%
- 3) Receiving Body of Water:  
Big Sandy Creek approximately 1.5 miles Northeast
- 4) Pad will be graded and seeded, if necessary, to as close to pre-existing conditions as practicable once construction is completed.
- 5) Pad dimensions are approximate.



Map Not to Scale

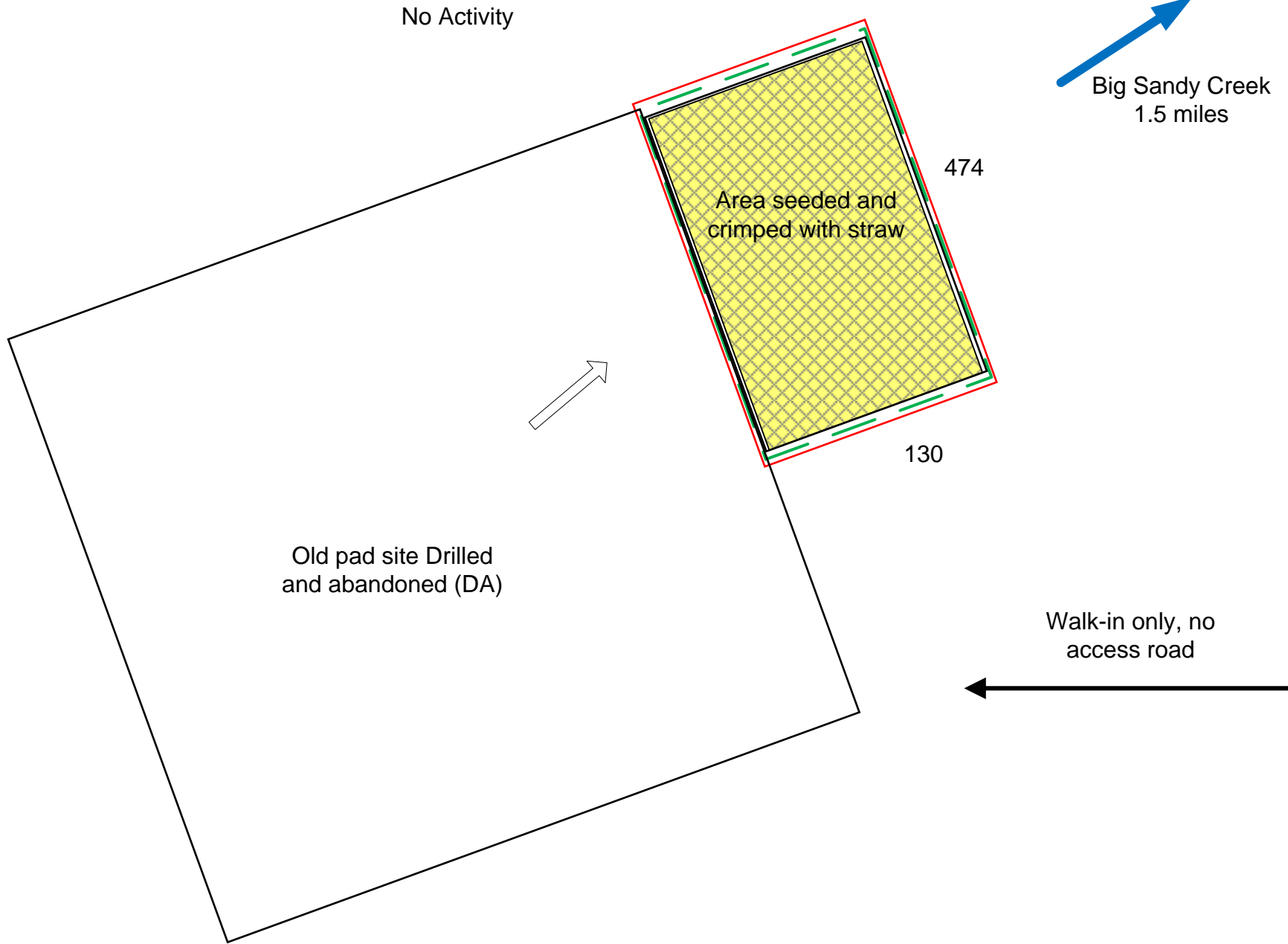


Lease/Name: Aloha Mula 6  
 Land Use: Rangeland  
 Runoff Risk: Low

API: COG-06389 SEC: 19 TWN: 10S RNG: 55W  
 Lat/Long: 39.16595/-103.59198  
 County: Lincoln

Permittee:  
 Wiepking-Fullerton  
 Energy, LLC

Inspection Date:  
 4/12/16



Satellite Map: Courtesy of Google Earth



**LEGEND**

	<b>Construction Boundary</b>		<b>Pad Surface Boundary</b>		<b>Ditch</b>
	<b>Disturbance Boundary</b>				<b>Ditch &amp; Berm</b>
	<b>Chemical Storage</b>				<b>Erosion Control Blanket</b>
	<b>Port-o-let</b>				<b>Filter Berm</b>
	<b>Roadbased Surface</b>				<b>Hydro-mulch</b>
	<b>Surface Water</b>				<b>Mulching</b>
	<b>Paved Road</b>				<b>Ripping</b>
	<b>Unpaved Road</b>				<b>Riprap</b>
	<b>Meter House</b>				<b>Sediment Trap</b>
	<b>Flare</b>				<b>Seeding</b>
	<b>AST</b>				<b>Silt Fence</b>
	<b>Water Sump</b>				<b>Sound Barrier</b>
	<b>Separator</b>				<b>Straw Bale</b>
					<b>Soil Roughening</b>
					<b>Wattle</b>

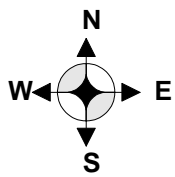
Topographic Map: Courtesy of Google Earth



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Map Not to Scale

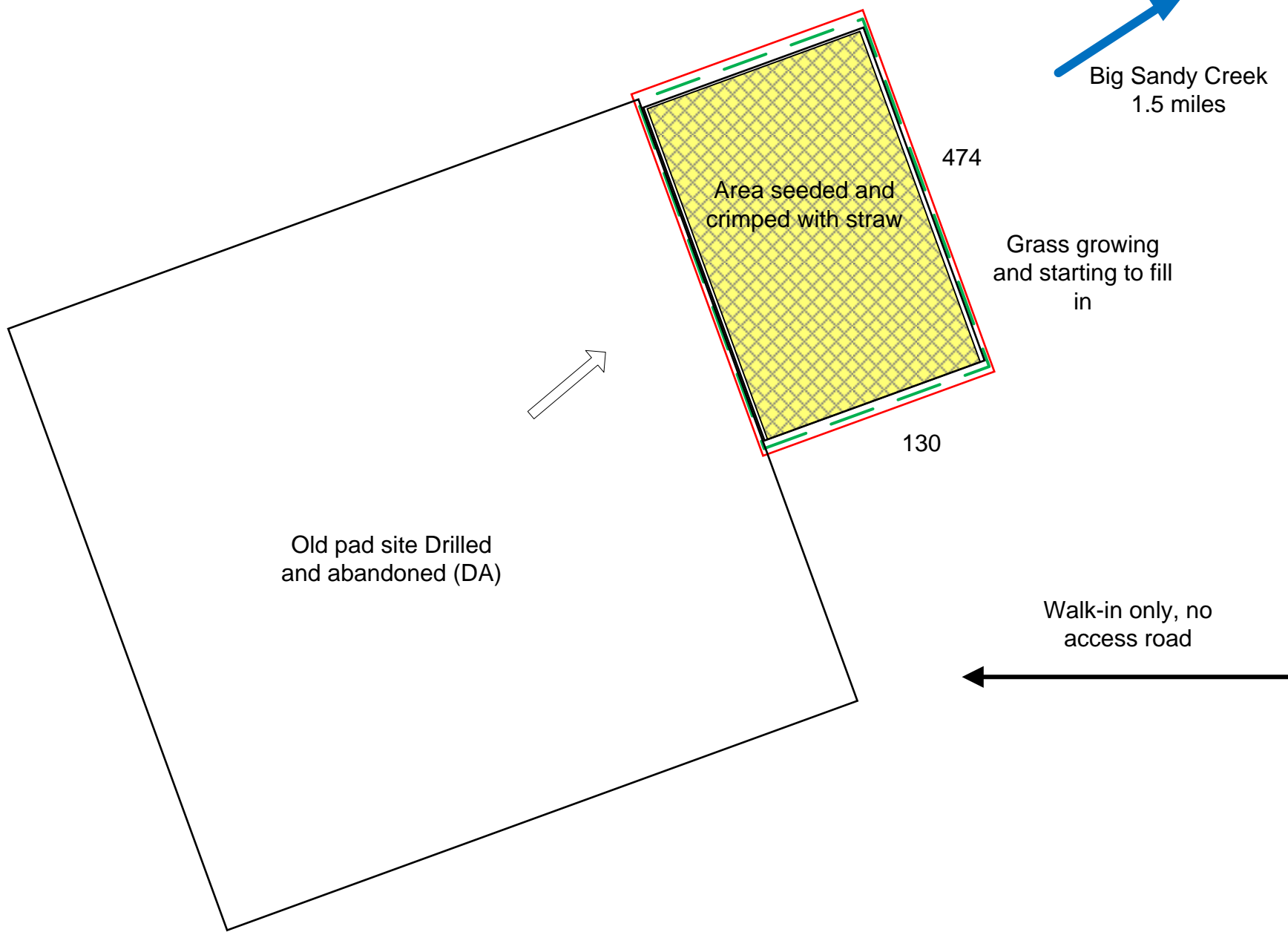


Lease/Name: Aloha Mula 6  
 Land Use: Rangeland  
 Runoff Risk: Low

API: COG-06389 SEC: 19 TWN: 10S RNG: 55W  
 Lat/Long: 39.16595/-103.59198  
 County: Lincoln

Permittee:  
 Wiepking-Fullerton  
 Energy, LLC

Inspection Date:  
 4/21/16



Satellite Map: Courtesy of Google Earth



**LEGEND**

	<b>Construction Boundary</b>		<b>Pad Surface Boundary</b>		<b>Ditch</b>
	<b>Disturbance Boundary</b>		<b>Wellhead</b>		<b>Ditch &amp; Berm</b>
	<b>Cut/Fill Line</b>		<b>Rig</b>		<b>Erosion Control Blanket</b>
	<b>Chemical Storage</b>		<b>Stock Pile</b>		<b>Filter Berm</b>
	<b>Port-o-let</b>		<b>Rolloff Frac Tank</b>		<b>Hydro-mulch</b>
	<b>Roadbased Surface</b>		<b>Frac Trailer</b>		<b>Mulching</b>
	<b>Surface Water</b>		<b>Equipment Storage</b>		<b>Ripping</b>
	<b>Paved Road</b>		<b>Trailer</b>		<b>Riprap</b>
	<b>Unpaved Road</b>		<b>Surface Flow</b>		<b>Sediment Trap</b>
	<b>Meter House</b>		<b>Vehicle Tracking Control</b>		<b>Seeding</b>
	<b>Flare</b>		<b>Cattleguard</b>		<b>Silt Fence</b>
	<b>AST</b>		<b>Dumpster</b>		<b>Sound Barrier</b>
	<b>Water Sump</b>		<b>Berm</b>		<b>Straw Bale</b>
	<b>Separator</b>		<b>Check Dam</b>		<b>Soil Roughening</b>
			<b>Culvert</b>		<b>Wattle</b>

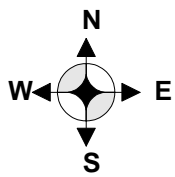
Topographic Map: Courtesy of Google Earth



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Map Not to Scale



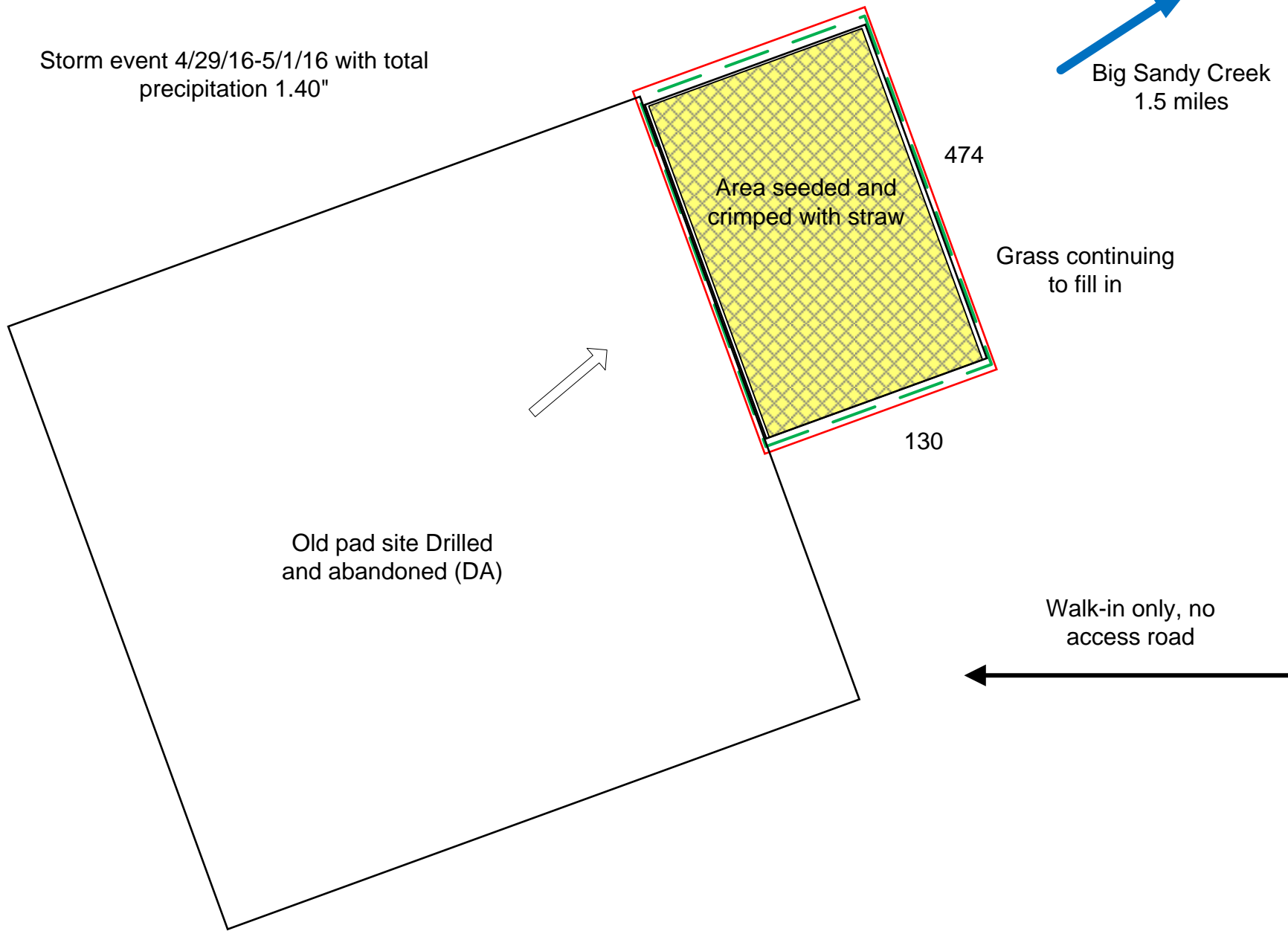
Lease/Name: Aloha Mula 6  
 Land Use: Rangeland  
 Runoff Risk: Low

API: COG-06389 SEC: 19 TWN: 10S RNG: 55W  
 Lat/Long: 39.16595/-103.59198  
 County: Lincoln

Permittee:  
 Wiepking-Fullerton  
 Energy, LLC

Inspection Date:  
 5/03/16

Storm event 4/29/16-5/1/16 with total precipitation 1.40"



Satellite Map: Courtesy of Google Earth



**LEGEND**

<b>Construction Boundary</b>	<b>Wellhead</b>	<b>Ditch</b>
<b>Disturbance Boundary</b>	<b>Rig</b>	<b>Ditch &amp; Berm</b>
<b>Cut/Fill Line</b>	<b>Stock Pile</b>	<b>Erosion Control Blanket</b>
<b>Chemical Storage</b>	<b>Rolloff Frac Tank</b>	<b>Filter Berm</b>
<b>Port-o-let</b>	<b>Frac Trailer</b>	<b>Hydro-mulch</b>
<b>Roadbased Surface</b>	<b>Equipment Storage</b>	<b>Mulching</b>
<b>Surface Water</b>	<b>Trailer</b>	<b>Ripping</b>
<b>Paved Road</b>	<b>Surface Flow</b>	<b>Riprap</b>
<b>Unpaved Road</b>	<b>Vehicle Tracking Control</b>	<b>Sediment Trap</b>
<b>Meter House</b>	<b>Cattleguard</b>	<b>Seeding</b>
<b>Flare</b>	<b>Dumpster</b>	<b>Silt Fence</b>
<b>AST</b>	<b>Berm</b>	<b>Sound Barrier</b>
<b>Water Sump</b>	<b>Check Dam</b>	<b>Straw Bale</b>
<b>Separator</b>	<b>Culvert</b>	<b>Soil Roughening</b>
		<b>Wattle</b>

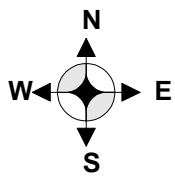
Topographic Map: Courtesy of Google Earth



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- 5) Pad dimensions are approximate.



Map Not to Scale



Lease/Name: Aloha Mula 6

API: COG-06389 SEC: 19 TWN: 10S RNG: 55W

Land Use: Rangeland

Lat/Long: 39.16595/-103.59198

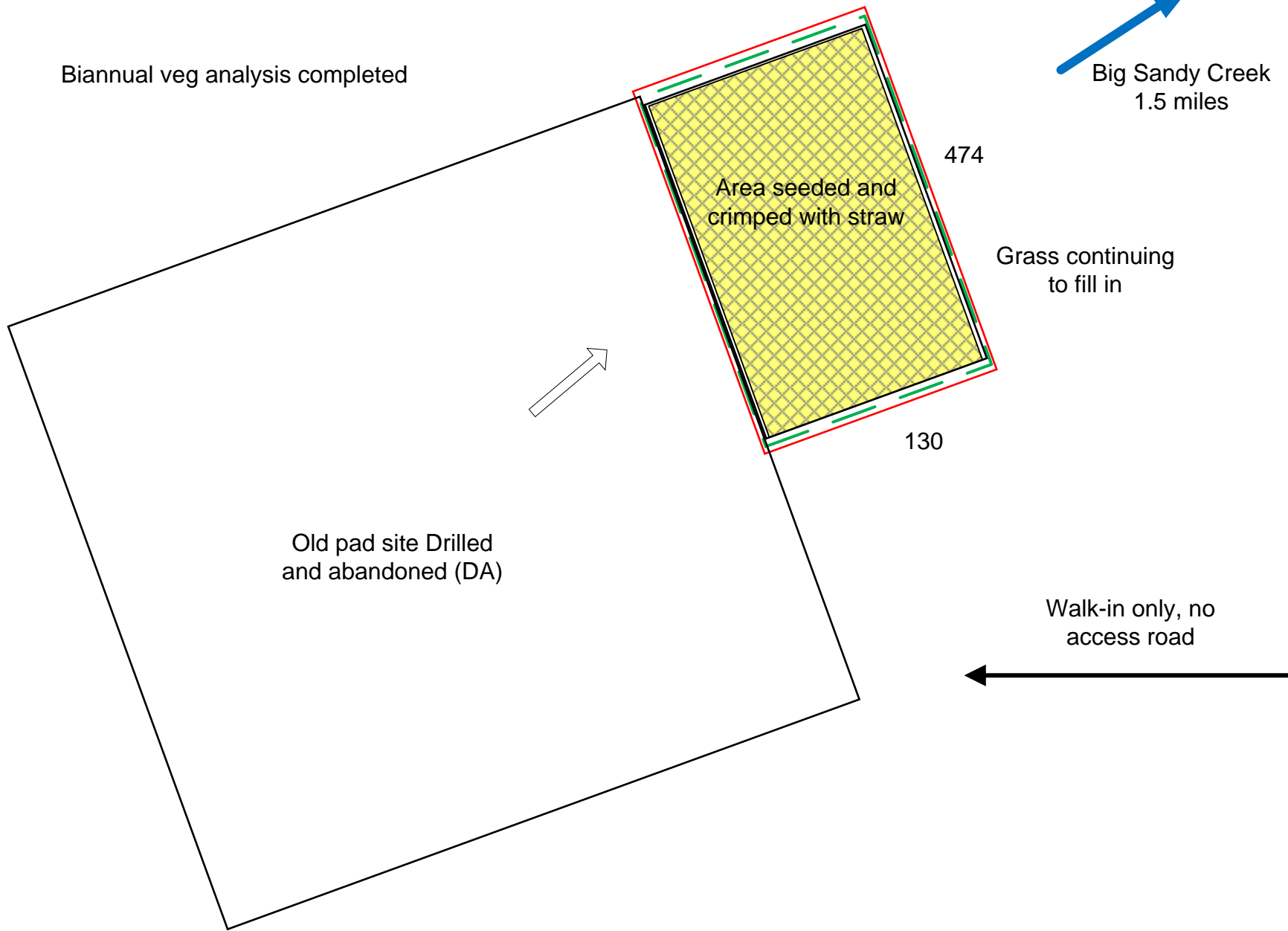
Runoff Risk: Low

County: Lincoln

Permittee:  
Wiepking-Fullerton  
Energy, LLC

Inspection Date:  
5/20/16

Biannual veg analysis completed



Satellite Map: Courtesy of Google Earth



**LEGEND**

<b>Construction Boundary</b>	<b>Disturbance Boundary</b>	<b>Cut/Fill Line</b>	<b>Chemical Storage</b>	<b>Port-o-let</b>	<b>Roadbased Surface</b>	<b>Surface Water</b>	<b>Paved Road</b>	<b>Unpaved Road</b>	<b>Meter House</b>	<b>Flare</b>	<b>AST</b>	<b>Water Sump</b>	<b>Separator</b>	<b>Pad Surface Boundary</b>	<b>Wellhead</b>	<b>Ditch</b>	<b>Ditch &amp; Berm</b>								
<b>Rig</b>	<b>Stock Pile</b>	<b>Rolloff Frac Tank</b>	<b>Frac Trailer</b>	<b>Equipment Storage</b>	<b>Trailer</b>	<b>Surface Flow</b>	<b>Vehicle Tracking Control</b>	<b>Cattleguard</b>	<b>Dumpster</b>	<b>Berm</b>	<b>Check Dam</b>	<b>Culvert</b>	<b>Erosion Control Blanket</b>	<b>Filter Berm</b>	<b>Hydro-mulch</b>	<b>Mulching</b>	<b>Ripping</b>	<b>Riprap</b>	<b>Sediment Trap</b>	<b>Seeding</b>	<b>Silt Fence</b>	<b>Sound Barrier</b>	<b>Straw Bale</b>	<b>Soil Roughening</b>	<b>Wattle</b>

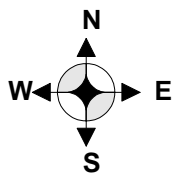
Topographic Map: Courtesy of Google Earth



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Map Not to Scale



Lease/Name: Aloha Mula 6

API: COG-06389 SEC: 19 TWN: 10S RNG: 55W

Land Use: Rangeland

Lat/Long: 39.16595/-103.59198

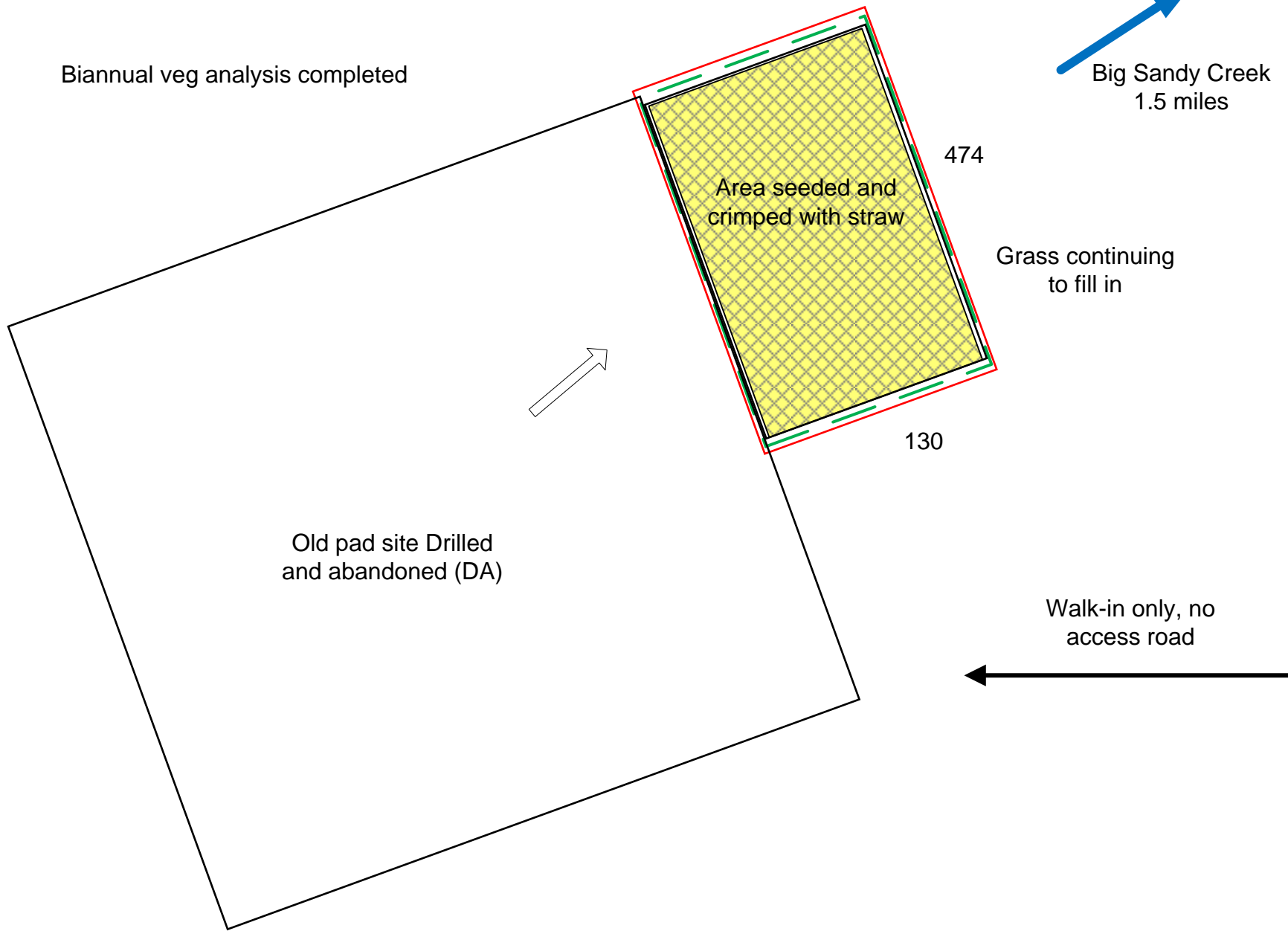
Runoff Risk: Low

County: Lincoln

Permittee:  
Wiepking-Fullerton  
Energy, LLC

Inspection Date:  
6/1/16

Biannual veg analysis completed



Satellite Map: Courtesy of Google Earth



**LEGEND**

<b>Construction Boundary</b>	<b>Disturbance Boundary</b>	<b>Cut/Fill Line</b>	<b>Chemical Storage</b>	<b>Port-o-let</b>	<b>Roadbased Surface</b>	<b>Surface Water</b>	<b>Paved Road</b>	<b>Unpaved Road</b>	<b>Meter House</b>	<b>Flare</b>	<b>AST</b>	<b>Water Sump</b>	<b>Separator</b>	<b>Pad Surface Boundary</b>	<b>Wellhead</b>	<b>Ditch</b>	<b>Ditch &amp; Berm</b>								
<b>Rig</b>	<b>Stock Pile</b>	<b>Rolloff Frac Tank</b>	<b>Frac Trailer</b>	<b>Equipment Storage</b>	<b>Trailer</b>	<b>Surface Flow</b>	<b>Vehicle Tracking Control</b>	<b>Cattleguard</b>	<b>Dumpster</b>	<b>Berm</b>	<b>Check Dam</b>	<b>Culvert</b>	<b>Erosion Control Blanket</b>	<b>Filter Berm</b>	<b>Hydro-mulch</b>	<b>Mulching</b>	<b>Ripping</b>	<b>Riprap</b>	<b>Sediment Trap</b>	<b>Seeding</b>	<b>Silt Fence</b>	<b>Sound Barrier</b>	<b>Straw Bale</b>	<b>Soil Roughening</b>	<b>Wattle</b>

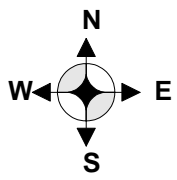
Topographic Map: Courtesy of Google Earth



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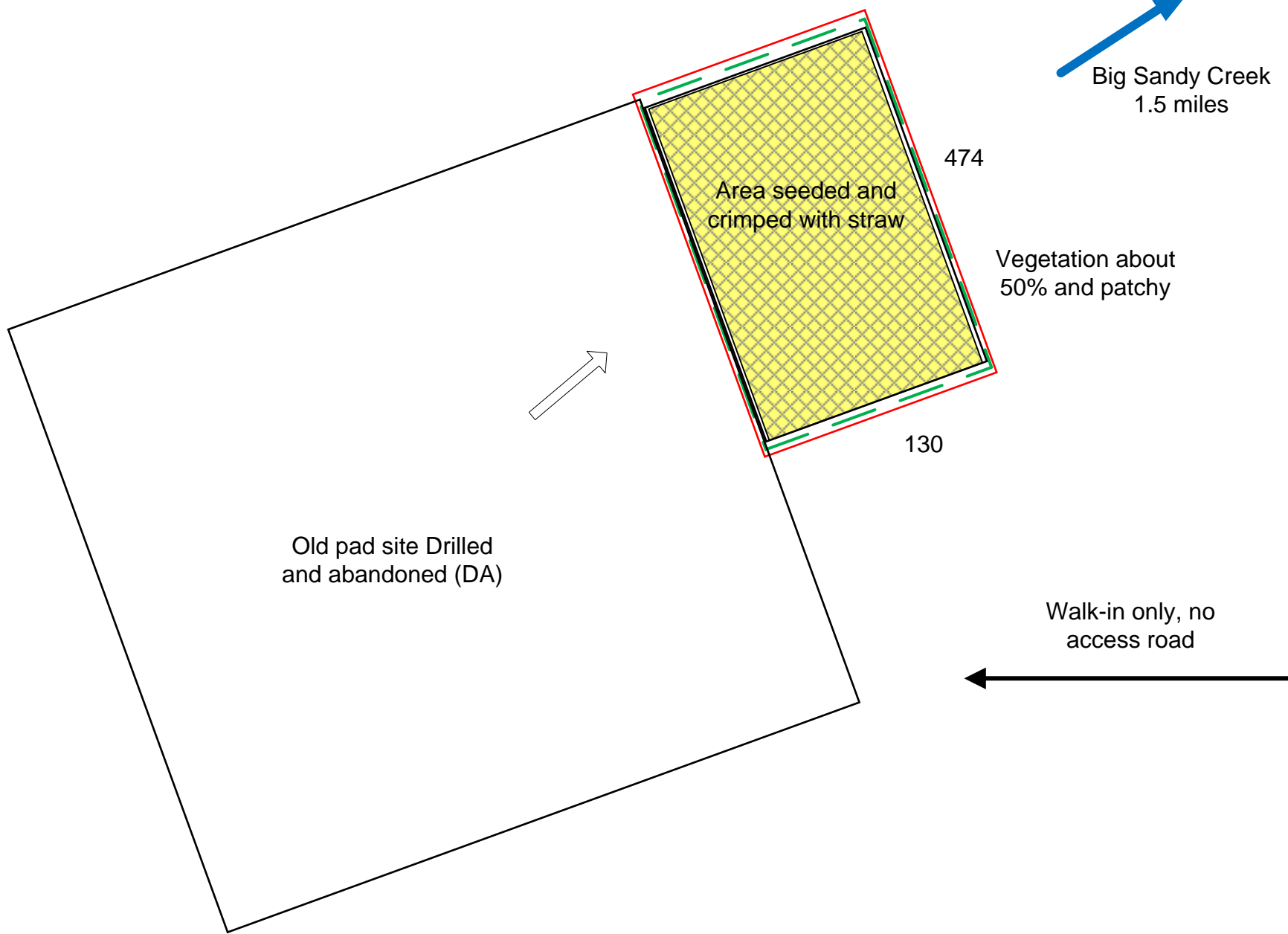
Map Not to Scale



Lease/Name: Aloha Mula 6  
 Land Use: Rangeland  
 Runoff Risk: Low

API: COG-06389 SEC: 19 TWN: 10S RNG: 55W  
 Lat/Long: 39.16595/-103.59198  
 County: Lincoln

Permittee:  
 Wiepking-Fullerton  
 Energy, LLC  
 Inspection Date:  
 7/6/16  
 72hr storm event



Satellite Map: Courtesy of Google Earth



**LEGEND**

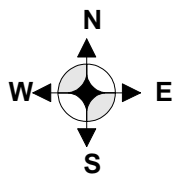
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	<b>Disturbance Boundary</b>				<b>Ditch &amp; Berm</b>
	<b>Chemical Storage</b>				<b>Erosion Control Blanket</b>
	<b>Port-o-let</b>				<b>Filter Berm</b>
	<b>Roadbased Surface</b>				<b>Hydro-mulch</b>
	<b>Surface Water</b>				<b>Mulching</b>
	<b>Paved Road</b>				<b>Ripping</b>
	<b>Unpaved Road</b>				<b>Riprap</b>
	<b>Meter House</b>				<b>Sediment Trap</b>
	<b>Flare</b>				<b>Seeding</b>
	<b>AST</b>				<b>Silt Fence</b>
	<b>Water Sump</b>				<b>Sound Barrier</b>
	<b>Separator</b>				<b>Straw Bale</b>
					<b>Soil Roughening</b>
					<b>Wattle</b>

- 1) Construction site boundaries include all ground surface disturbances and approximately 10-15 feet beyond perimeter BMPs. Boundaries are subject to change at any time for pad expansion, maintenance and addition of BMP structures, or new access roads.
- 2) Surrounding conditions include rangeland vegetation with pre-disturbance vegetation density approximately 70%
- 3) Receiving Body of Water:  
Big Sandy Creek approximately 1.5 miles Northeast
- 4) Pad will be graded and seeded, if necessary, to as close to pre-existing conditions as practicable once construction is completed.
- 5) Pad dimensions are approximate.

Topographic Map: Courtesy of Google Earth



Map Not to Scale



Lease/Name: Aloha Mula 6

API: COG-06389

SEC: 19 TWN: 10S RNG: 55W

Land Use: Rangeland

Lat/Long: 39.16595/-103.59198

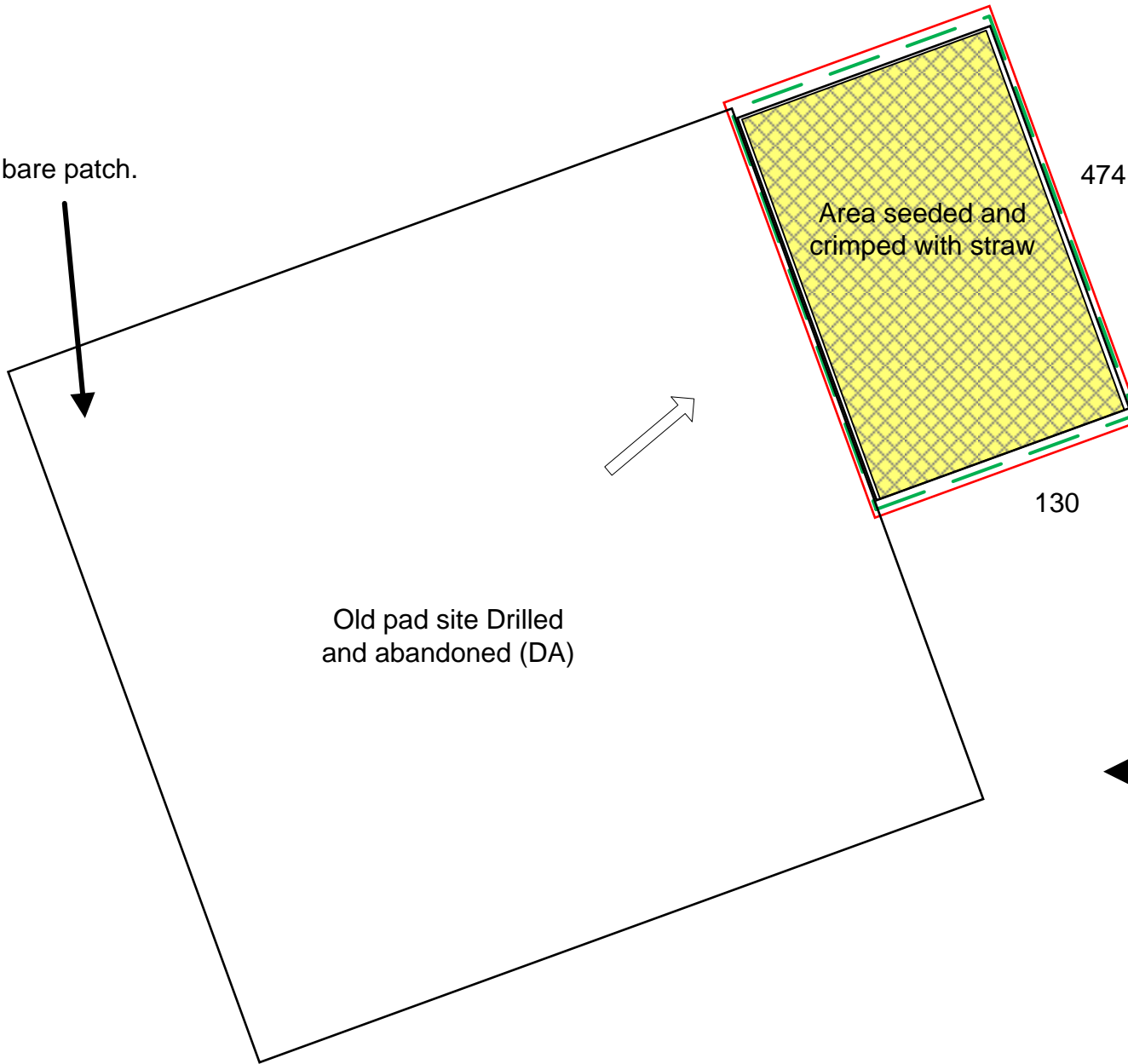
Runoff Risk: Low

County: Lincoln

Permittee:  
Wiepking-Fullerton  
Energy, LLC

Inspection Date:  
8/1/16  
72hr storm event

Large bare patch.



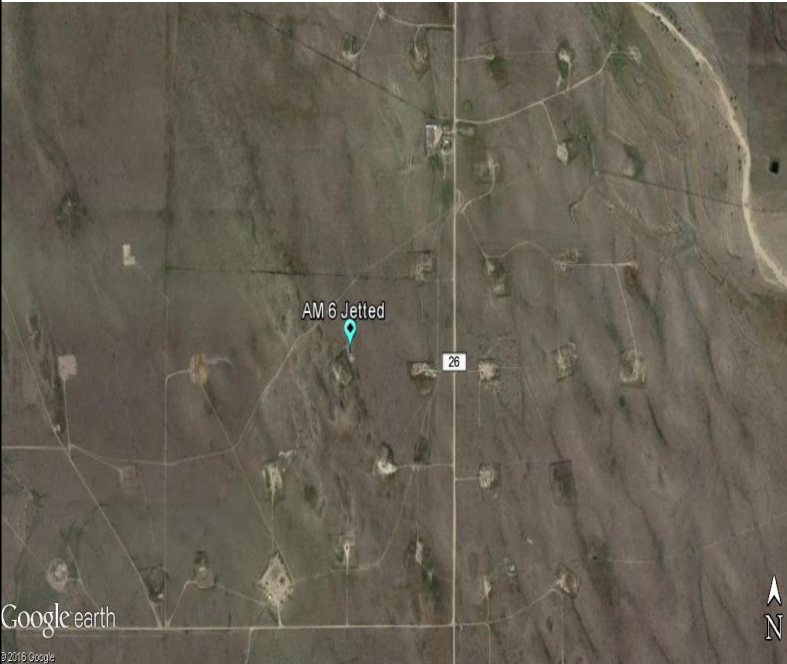
Big Sandy Creek  
1.5 miles

Vegetation about  
50% and patchy,  
site recently  
mowed.

Old pad site Drilled  
and abandoned (DA)

Walk-in only, no  
access road

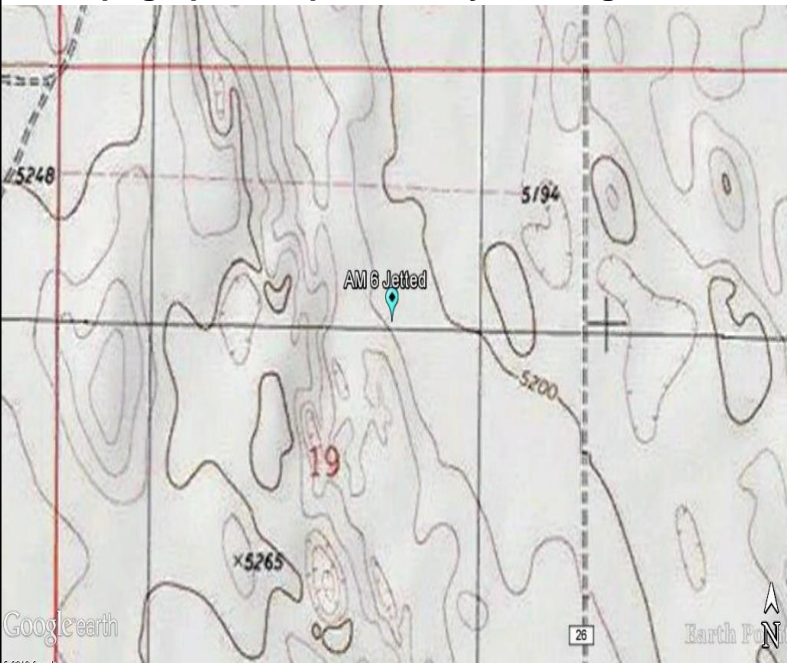
Satellite Map: Courtesy of Google Earth



LEGEND

	<b>Construction Boundary</b>		<b>Disturbance Boundary</b>		<b>Cut/Fill Line</b>		<b>Chemical Storage</b>		<b>Port-o-let</b>		<b>Roadbased Surface</b>		<b>Surface Water</b>		<b>Paved Road</b>		<b>Unpaved Road</b>		<b>Meter House</b>		<b>Flare</b>		<b>AST</b>		<b>Water Sump</b>		<b>Separator</b>		<b>Wellhead</b>		<b>Rig</b>		<b>Stock Pile</b>		<b>Rolloff Frac Tank</b>		<b>Frac Trailer</b>		<b>Equipment Storage</b>		<b>Trailer</b>		<b>Surface Flow</b>		<b>Vehicle Tracking Control</b>		<b>Cattleguard</b>		<b>Dumpster</b>		<b>Berm</b>		<b>Check Dam</b>		<b>Culvert</b>		<b>Ditch</b>		<b>Ditch &amp; Berm</b>		<b>Erosion Control Blanket</b>		<b>Filter Berm</b>		<b>Hydro-mulch</b>		<b>Mulching</b>		<b>Ripping</b>		<b>Riprap</b>		<b>Sediment Trap</b>		<b>Seeding</b>		<b>Silt Fence</b>		<b>Sound Barrier</b>		<b>Straw Bale</b>		<b>Soil Roughening</b>		<b>Wattle</b>
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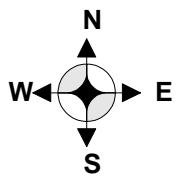
Topographic Map: Courtesy of Google Earth



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Map Not to Scale



Lease/Name: Aloha Mula 6

API: COG-06389

SEC: 19 TWN: 10S RNG: 55W

Land Use: Rangeland

Lat/Long: 39.16595/-103.59198

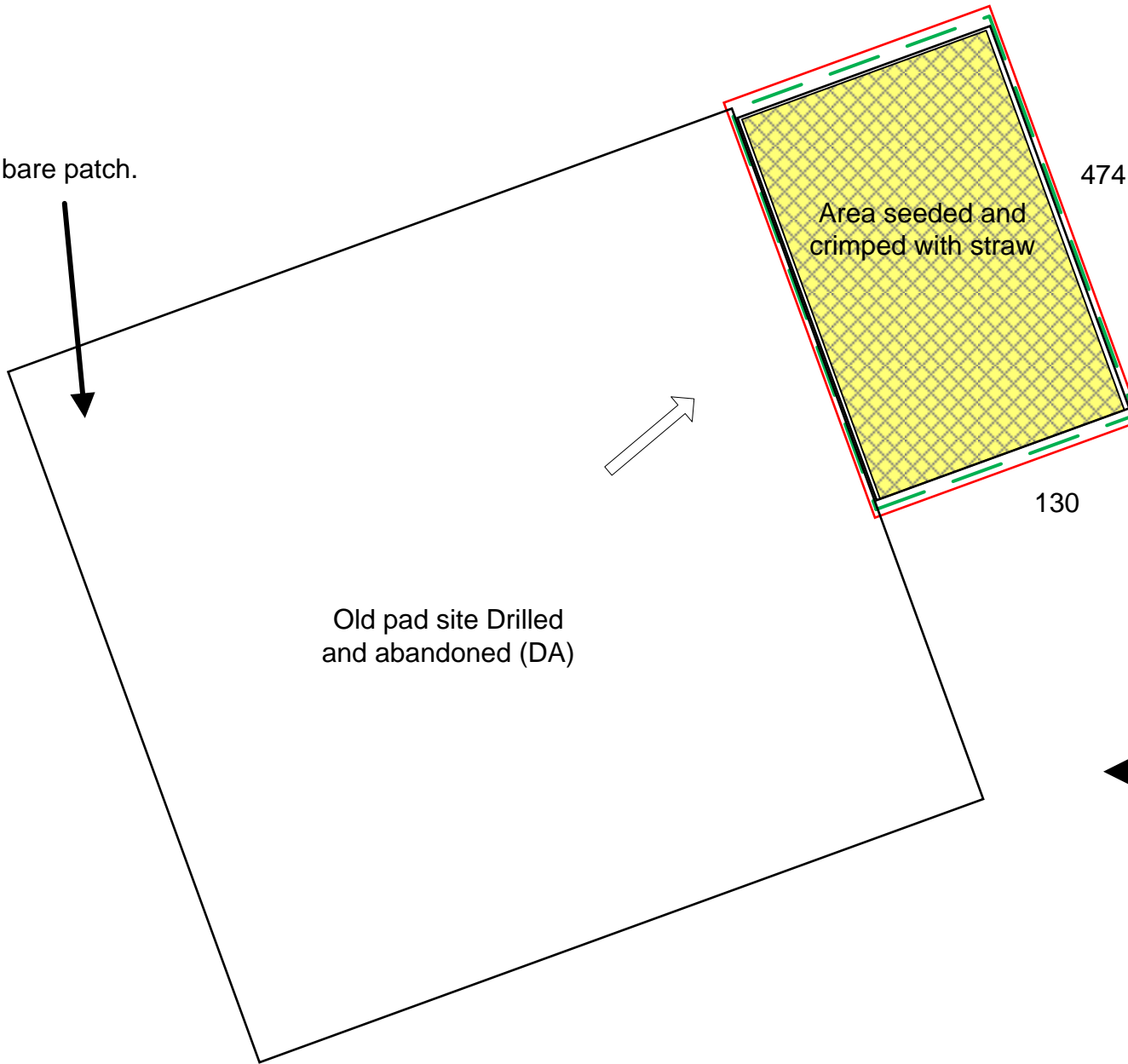
Runoff Risk: Low

County: Lincoln

Permittee:  
Wiepking-Fullerton  
Energy, LLC

Inspection Date:  
9/8/16

Large bare patch.



Big Sandy Creek  
1.5 miles

Semi-annual LPI  
measurement

Old pad site Drilled  
and abandoned (DA)

Walk-in only, no  
access road

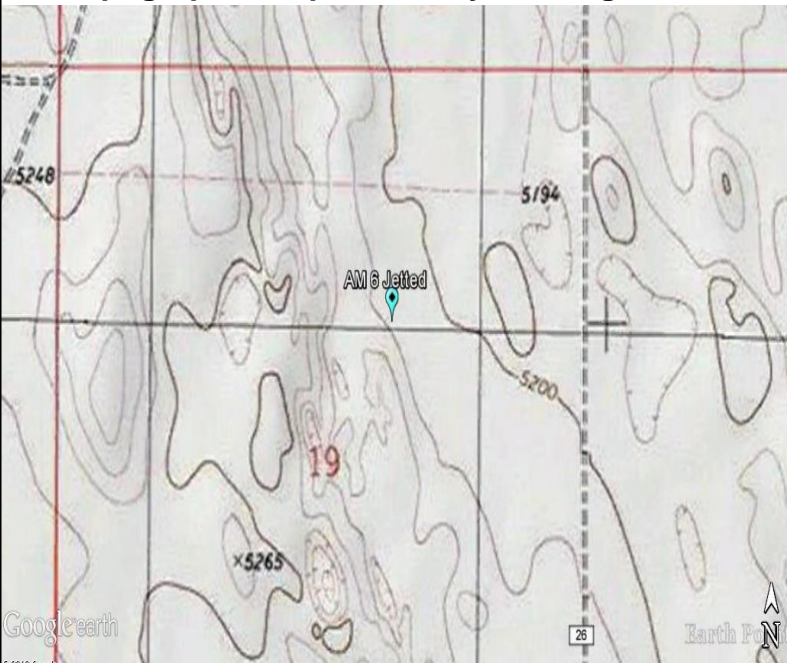
Satellite Map: Courtesy of Google Earth



**LEGEND**

	<b>Construction Boundary</b>		<b>Pad Surface Boundary</b>		<b>Ditch</b>
	<b>Disturbance Boundary</b>		<b>Wellhead</b>		<b>Ditch &amp; Berm</b>
	<b>Cut/Fill Line</b>		<b>Rig</b>		<b>Erosion Control Blanket</b>
	<b>Chemical Storage</b>		<b>Stock Pile</b>		<b>Filter Berm</b>
	<b>Port-o-let</b>		<b>Rolloff Frac Tank</b>		<b>Hydro-mulch</b>
	<b>Roadbased Surface</b>		<b>Frac Trailer</b>		<b>Mulching</b>
	<b>Surface Water</b>		<b>Equipment Storage</b>		<b>Ripping</b>
	<b>Paved Road</b>		<b>Trailer</b>		<b>Riprap</b>
	<b>Unpaved Road</b>		<b>Surface Flow</b>		<b>Sediment Trap</b>
	<b>Meter House</b>		<b>Vehicle Tracking Control</b>		<b>Seeding</b>
	<b>Flare</b>		<b>Cattleguard</b>		<b>Silt Fence</b>
	<b>AST</b>		<b>Dumpster</b>		<b>Sound Barrier</b>
	<b>Water Sump</b>		<b>Berm</b>		<b>Straw Bale</b>
	<b>Separator</b>		<b>Check Dam</b>		<b>Soil Roughening</b>
			<b>Culvert</b>		<b>Wattle</b>

Topographic Map: Courtesy of Google Earth



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Map Not to Scale

**APPENDIX C**  
**RECLAMATION MONITORING REPORT**







Facing North



Facing East



Facing South



Facing West

Photographs Taken: 05/20/2016

Aloha Mula 6 – Reclamation Monitoring

**Photographic Log**

Location: Aloha Mula 6

API: 05-073-06389

Status: Final

Location: Lincoln County, Colorado

Monitoring Date: 09/08/2016

**Qualitative Analysis**

Access Road in Use	Y
Road recontoured properly	NA
Site recontoured properly	Y
Road base removed	Y
Equipment on site	Y
Trash or debris on site	N
Vehicle disturbances	N
Wildlife disturbances	N
Grazing disturbances	N
Reclamation area Fenced	Y
Subsidence	N
Seed germination	Y
Desirable plants vigorous	Y
Uniform growth	N

**General Comments**

Noxious weeds observed onsite: PAMI2  
 Species observed onsite: AMPS, BAPR5, CHAMA15, COCAC3, DACA6, ARPO2, BOCU, BOGR2, ERIGE2, ERIGE3, LIPU, MUSQ3, PGB1  
 Two track visible on access.

**Recommendations**

Alleviate compaction and spot seed access road.

**Quantitative Analysis**

Onsite	
Species	%
Unknown Perennial Bunch Grass	43
<i>Ambrosia psilostachya</i>	10
<i>Conyza canadensis</i>	4
<i>Erigeron spp.</i>	2
<i>Bouteloua curtipendula</i>	1
<i>Liatis punctata</i>	1
<i>Bassia prostrata</i>	1
<i>Bouteloua dactyloides</i>	<1
<i>Chamaesyce sp.</i>	<1
<i>Daucus carota</i>	<1
<i>Argemone polyanthemos</i>	<1
<i>Munroa squarrosa</i>	<1
Total Canopy Cover	62
Non-Weed Canopy Cover*	47
Non-Weed Basal Cover	4

Offsite	
Species	%
<i>Bouteloua gracilis</i>	54
Unknown Perennial Bunch Grass #2	5
<i>Yucca glauca</i>	5
Unknown Perennial Bunch Grass	3
Unknown Perennial Forb	1
<i>Artemisia filifolia</i>	1
<i>Ambrosia psilostachya</i>	1
<i>Aristida purpurea</i>	1
<i>Andropogon hallii</i>	<1
<i>Opuntia polyacantha</i>	<1
Total Canopy Cover	71
Non-Weed Canopy Cover*	70
Non-Weed Basal Cover	9

**Quantitative Results**

Ratio of % Non-weedy Canopy Cover Onsite to % Non-weedy Canopy Cover Offsite = 67%  
 Ratio of % Non-weedy Basal Cover Onsite to % Non-weedy Basal Cover Offsite = 44%

\*Noxious weeds are designated species determined by the Colorado Noxious Weed Act. Other undesirable species are commonly known as weeds in the region.



Facing North



Facing East



Facing South



Facing West

Photographs Taken: 09/08/2016

Aloha Mula 6 – Reclamation Monitoring

**Photographic Log**