



**Kerr-McGee Oil & Gas Onshore LP**

**Interim Reclamation Plan**

**Clover 2-29HZ Well Pad and Facility**

**NW  $\frac{1}{4}$ , NE  $\frac{1}{4}$ , Sec 29, T2N, R67W**

**Weld County, Colorado**

**July, 2023**

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## 1.0 INTRODUCTION

Kerr-McGee Oil & Gas Onshore LP (KMOG) has developed this site-specific Interim Reclamation Plan to establish proper planning and execution for reclamation of the land within areas that are affected by oil and gas location construction and development, but no longer in use by production operations once turned over. When all wells on a pad are completed and turned over to production, the drilling footprint will be reduced, and areas not needed for production will be restored and re-vegetated in accordance with Colorado Oil and Gas Conservation Commission (COGCC) Series 1000 Reclamation Rules and consistent with the requirements of Rule 1003 for Interim Reclamation. Reference shall also be made to Rules 304.c(14) Topsoil Protection Plan and 304.c(15) Stormwater Management Plan within this process.

## 2.0 SITE DESCRIPTION

Operator:	Kerr-McGee Oil & Gas Onshore LP
COGCC ID:	47120
Project / Site Name:	Clover 2-29HZ Well Pad and Facility
Location:	Sec 29, T2N, R67W, Weld County, Colorado
Elevation:	4995.8'
Land Type:	FEE
Surface Owner:	Camenisch, Charitable Remainder
Total Area of Project:	CONSTRUCTION PHASE: 11.71 acres WORKING PAD SURFACE AREA: 7.09 acres TOTAL AREA INTERIM RECLAIMED FOR PRODUCTION: 7.92 acres INTERIM RECLAIM / PRODUCTION AREA: 3.79 acres
Description of Existing Vegetation:	Existing vegetation on the subject property is dryland pasture interspersed with native and undesirable grasses and forbs, primary use is agriculture.
Soil Type(s):	4 – Aquolls and Aquepts, flooded. HSG: D 44 – Olney loamy sand, 1 to 3 percent slopes. HSG: B 47 – Olney fin sandy loam, 1 to 3 percent slopes. HSG: B
Stream Crossings:	There are no stream crossings associated with the location.
Primary Receiving Water:	Unnamed pond 77 feet west of the proposed location.
General Direction of Flow and Drainage:	Northwest
Reclamation Manager/Contact:	Austin Lee – HSE Advisor Occidental Petroleum Corporation Office: (970) 515-1058
Major Equipment List:	The Clover 2-29HZ location will be a (12) well pad, with (0) tanks, (5) separators, (2) LACTs, (1) air compressor, and (2) meter buildings.

**TENTATIVE DEVELOPMENT & OPERATION SCHEDULE**

<b>Phase</b>	<b>Work Activity</b>	<b>Estimated Start Date*</b>
CON	Location construction	February 2024
SPUD	Surface drilling and well prep operations	April 2024
DRL	Horizontal drilling	May 2024
FRAC	Hydraulic fracturing operations and well completions	December 2024
FAC	Production facility construction	October 2024
INT	Interim reclamation of construction disturbance	October 2025

*\*Based on pending receipt of required permits, and drilling rig availability. Schedule is tentative and subject to change.*

**3.0 PROPOSED SEQUENCE OF MAJOR ACTIVITIES**

**3.1 Surface Owner Consultation and Timing**

Surface owner consultation shall be conducted to minimize disruption of agricultural operations and designate final land use. Interim reclamation shall occur approximately no later than 10/31/2025 after conclusion of subsequent operations. If soil conditions are not conducive due to weather conditions, a Form 4 Sundry Notice shall be submitted, and reclamation commenced as soon as conditions allow and as practicable.

**3.2 Removal of drilling and completions equipment and associated debris and waste**

Debris and non-exploration and production (E&P) waste materials (concrete, sack bentonite and other drilling mud additives, sand, plastic, pipe, and cable) will be removed, and cellars, rat holes, and other boreholes unnecessary for further lease operations will be backfilled. Soil and aggregate mix used to build a compacted surface for construction and drilling purposes will be removed in areas no longer intended for production and interim reclamation and disposed of at an approved facility.

**3.3 Recontouring, compaction relief and topsoil re-distribution**

All segregated soil horizons removed for construction will be replaced to their original relative positions and contour and will be tilled adequately to alleviate compaction and re-establish a proper seedbed. Operator will be responsible for segregating topsoil, backfilling, re-compacting any backfill, reseeding, and re-contouring the surface on all disturbed areas of an oil and gas location, including that which is not being used for production or processing of E&P materials so as not to interfere with Surface Owner(s) operations.

**3.4 Soil Preparation**

Soil preparation for interim reclamation generally includes the following practices:

**3.4.1 Compaction Alleviation**

After topsoil re-distribution, the interim reclamation area shall be cross ripped to a depth of eighteen inches with an agricultural ripper/subsoiler; however, this depth may be adjusted in rocky or shallow soils. Chiseling/ripping will be performed at the minimum depth of topsoil. Cultipacking or disking may be required to reduce soil clod size. Ripping with construction style shanks, for the purpose of surface ridge roughness as a stormwater BMP, is only allowed to a six-inch depth, and will be maintained following any precipitation or surface erosion which has the potential to compromise the BMP.

**3.4.2 Leveling**

All areas will be leveled and graded to drain properly and blend to the adjacent, natural landscape. Leveling will generally be completed with a motor grader, but can also include a dozer, landplane and other pieces of equipment based on soil and topography.

### **3.4.3 Soil Amendments**

Necessary amendments will be determined by soil analysis completed during Topsoil Protection Plan Site Investigation, land use, site conditions at time of interim reclamation, and surface owner consultation. Soil amendments will be incorporated during seedbed preparation.

### **3.4.4 Seedbed Preparation**

Seedbed preparation will be completed by disking, harrowing or cultipacking disturbed soil to provide a seedbed that is firm and friable. Seeding will not occur until after a proper seedbed is prepared, soil amendments applied, and all disturbed soil is viable for germination.

### **3.4.5 Surface Rock Removal**

Surface rocks that interfere with agricultural operations, seeding equipment or future mowing operations will be removed for the interim reclamation area.

## **3.5 Seeding**

Seed mix is determined based on consultations with NRCS, CPW, and Surface Owner; also, by soil type, land use, adjacent reference area vegetation and in accordance with Rule 1202.a.6. Equipment shall be cleaned from previous mixes, soil, or debris, prior to mobilizing and commencing seeding operations between properties. In most cases, seed will be planted with a drill seeder and tractor at the appropriate depth and rate based on mix and manufacturer specifications, as referenced in Appendix B. Seeding shall not occur in windy conditions or when the soil is frozen or wet.

## **3.6 Mulching**

Mulch will be applied within 48 hours after seeding on non-cropland. Mulch application in cropland shall be applied as requested by surface owner. If using straw or hay mulch, only mulch that has been certified as weed-free forage may be used. All mulch types must be anchored properly by methods such as crimping, disking and/or tackifier. Contractor may adjust the rate of mulch and type based on site location, soils, slopes, and time of year to maximize seeding and erosion control success.

## **3.7 Implement Post-Construction Stormwater Control Measures**

Post-construction stormwater control measures will be installed during construction surface reduction and interim reclamation efforts. Erosion and sediment control measures will include consideration of land use, surface owner grazing practices, general location topography and flow, and potential damage to materials. Refer to Appendix C for the interim reclamation grading plan and design, as well as Section 5.0 of this plan for a list of site-specific stormwater control measures.

## **3.8 Weed control**

Weed control measures shall be conducted in compliance with the Colorado Noxious Weed Act, C.R.S. §35-5.5-115, and the current rules pertaining to the administration and enforcement of the Colorado Noxious Weed Act.

Weed control measures shall be conducted in consultation with the Surface Owner and County/Municipality Weed Management Specialist(s) based on site specific conditions. KMOG will monitor and control noxious weeds until achieving reclamation threshold for release within reclaimed disturbance areas, including monitoring to measure success of treatments. Weed control measures employed may include mowing or removal and herbicide treatment during the appropriate growing season. During drilling, production, and reclamation operations, all disturbed areas shall be kept reasonably free of noxious weeds and undesirable species.

### **3.9 Interim Reclamation Completion Notice**

Upon reaching desired and permitted reclamation goals based on COGCC Rule 1003.e, a Form 4 Interim Reclamation Completion Notice (IRCN) shall be submitted to document successful interim reclamation as compared to adjacent reference area(s).

### **4.0 INTERIM RECLAMATION STORMWATER, EROSION & SEDIMENT CONTROL MEASURES / BMPS**

Measures for stormwater, erosion and sediment control will be accomplished through a combination of construction techniques, structural and non-structural controls, vegetation and re-vegetation, administrative controls, and good housekeeping practices during interim reclamation. Control measures will be implemented and adjusted with changing site conditions, as well as throughout all phases of construction. All control measures deployed will be identified on as-built maps.

A summary of stormwater control measures can be found in Appendix C of this document. A detailed description of intended structural and non-structural stormwater control measures for Clover 2-29HZ is as follows.

#### **4.1 Structural Control Measures / BMPs**

Structural control measures are established to reduce erosion and site degradation, and to minimize or mitigate off-site sediment transport in a manner effective for development and operation of an oil and gas location. The following structural control measures will be implemented at the proposed location.

##### **4.1.1 Diversion Ditch and Berm (DD)**

- A berm will be installed around the northern, eastern, western, and southern edges of the Clover 2-29HZ well pad and the northern, eastern, western and southern edges of the facility pad to divert stormwater run-on & run-off to a designated outlet structure
- This BMP will be installed during construction disturbance reduction, and prior to removal of construction perimeter controls.
- Diversion ditch and berm will remain in-place until final reclamation activities commence.

##### **4.1.2 Spillway and Outlet (SW/O)**

- A spillway and/or outlet are designed to capture sediment transported in surface runoff and slowly release flows to allow time for settling of sediment prior to discharge from the location.
- Spillway and/or outlet will be installed concurrently with the well pad and facility diversion berm.
- A spillway/outlet will be installed in the western portion of the well pad berm and the northwestern portion of the facility pad berm for Clover 2-29HZ during interim reclamation.
- All spillways and outlets will remain in-place until final reclamation activities are complete.

##### **4.1.3 Culvert (C)**

- Culverts are used to move water under a road or crossing, or to direct flow to a designated endpoint, and are sized to manage anticipated watershed and flow rates.
- Culverts will be installed at the western access off the well pad and facility pad, as well as along the northwestern portion of the access road for Clover 2-29HZ intersecting with Weld County Road 18. Culverts will be evaluated at the time of construction and installed as needed.
- Permanent culverts will be reinforced with inlet and outlet protection to mitigate sediment transport and surface erosion.
- These BMPs will remain in place throughout the life of production for Clover 2-29HZ and removed during final reclamation.

#### **4.1.4 Inlet / Outlet Protection (IP/OP)**

- Inlet / outlet protection is a permeable barrier installed around a drain or culvert to filter runoff and remove sediment.
- This BMP will be installed congruently with spillways and outlets.
- Inlet and outlet protection will be installed for all permanent culverts at Clover 2-29HZ.
- Inlet and outlet protection will remain in place throughout the life of production for Clover 2-29HZ and removed during final reclamation.

#### **4.1.5 Seed & Mulch (SM)**

- Seed and mulch are utilized in disturbed areas to establish stabilization through vegetative cover.
- Seeding will take place once surface disturbing activities are complete. Topsoil stockpiles will be stabilized with seed and mulch no longer than 14-days after completion of stockpiling efforts unless weather or ground conditions are not suitable to properly create a seedbed and promote successful germination.
- Seed & mulch will be installed on all disturbed areas no longer utilized for construction, and on all topsoil stockpiles which will remain on Clover 2-29HZ for use during final reclamation. Anticipated topsoil stockpiles will be situated and bermed along the northern, eastern and southern perimeter of the facility and western, southern, eastern and northern perimeter of the well pad.
- Seeding will remain in place until re-disturbed during final reclamation efforts.
- In areas to be returned to crop, the seed bed will be prepared and left for surface owner to plant during next agricultural season.

### **4.2 Non-Structural Control Measures / BMPs**

Non-structural control measures / BMPs do not involve a structure or engineered solution. Non-structural control measures include:

#### **4.2.1 Construction Phasing & Sequencing**

- Construction phasing and sequencing will be implemented at Clover 2-29HZ to minimize the amount of surface disturbance and exposed soils to the greatest extent practicable. Interim reclamation will occur in two phases throughout the project.

#### **4.2.2 Protection and Preservation of Existing Vegetation**

- Pre-existing vegetation cover will only be removed where necessary for the operation of construction and development at Clover 2-29HZ. Trees will only be cut or trimmed to facilitate clearing, grading and safe installation of the location.
- Vegetative buffers will be preserved to the greatest extent practicable for construction and development.

#### **4.2.3 Good Housekeeping**

- Good housekeeping measures will be implemented to prevent sediment, trash and toxic or hazardous substances from entering surface waters or impacting soils. Housekeeping practices include routine inspections, regular cleaning, site and equipment organization and maintenance, and appropriate chemical storage.

### **5.0 INTERIM STABILIZATION**

Interim reclamation will commence within twelve months from first date of production, barring any subsequent drilling, completions, or operational activities which are required, for all disturbed areas affected by construction and drilling operations which are no longer in use or needed for production.

Interim reclaimed areas will be returned to their original condition as practicable, or their final land use as designated by the surface owner.

### **5.1 Non-Cropland**

Non-crop locations will be reclaimed within six months from completion of final ground disturbing activities, per rule 1003.b. Interim stabilization in non-cropland will follow the Colorado Oil and Gas Conservation Commission (COGCC) definition and guidance: “all disturbed areas no longer in use shall be considered complete when all ground surface disturbing activities at the site have been completed, and all disturbed areas have been either built on, compacted, covered, paved, or otherwise stabilized in such a way as to minimize erosion to the extent practicable, or a uniform vegetative cover has been established that reflects pre-disturbance or reference area forbs, shrubs, and grasses with total percent plant cover of at least eighty percent (80%) of pre-disturbance levels or reference areas, excluding noxious weeds”. All non-cropland locations will be reclaimed within six months from completion of ground disturbing activities, per rule 1003.b.

### **5.2 Cropland**

Per rule 1003.b., “All segregated soil horizons removed from crop lands shall be replaced to their original relative positions and contour and shall be tilled adequately to re-establish a proper seedbed. Any perennial forage crops that were present before disturbance shall be re-established”. All cropland locations will be reclaimed within three months from completion final ground disturbing activities.

## **6.0 INSPECTIONS AND MAINTENANCE**

### **6.1 Inspections**

Inspections will be conducted to document the status of construction activities, stormwater control measure placement, maintenance needs, and effectiveness, to evaluate pollution sources, and to document reclamation / interim stabilization progress. Inspections will be managed by the Stormwater Manager and SWMP Administrator and conducted by their designated representative(s). Inspection forms will document non-compliance conditions, including any release of sediment or other contaminants, additional control measures that are needed, or repair and maintenance work orders.

For sites earthwork and construction is completed, but final stabilization is not achieved due to vegetative cover, inspections shall be conducted every 30 days and exclude precipitation or melt event response. Inspections will continue until all reclaimed areas have achieved a cover of 70% the pre-construction reference vegetation (i.e., final stabilization).

Findings, inspection records and site maps are documented electronically and available within 24 hours of any inspection. All inspection records are stored for a minimum of three years after the location has achieved final stabilization.

### **6.2 Maintenance**

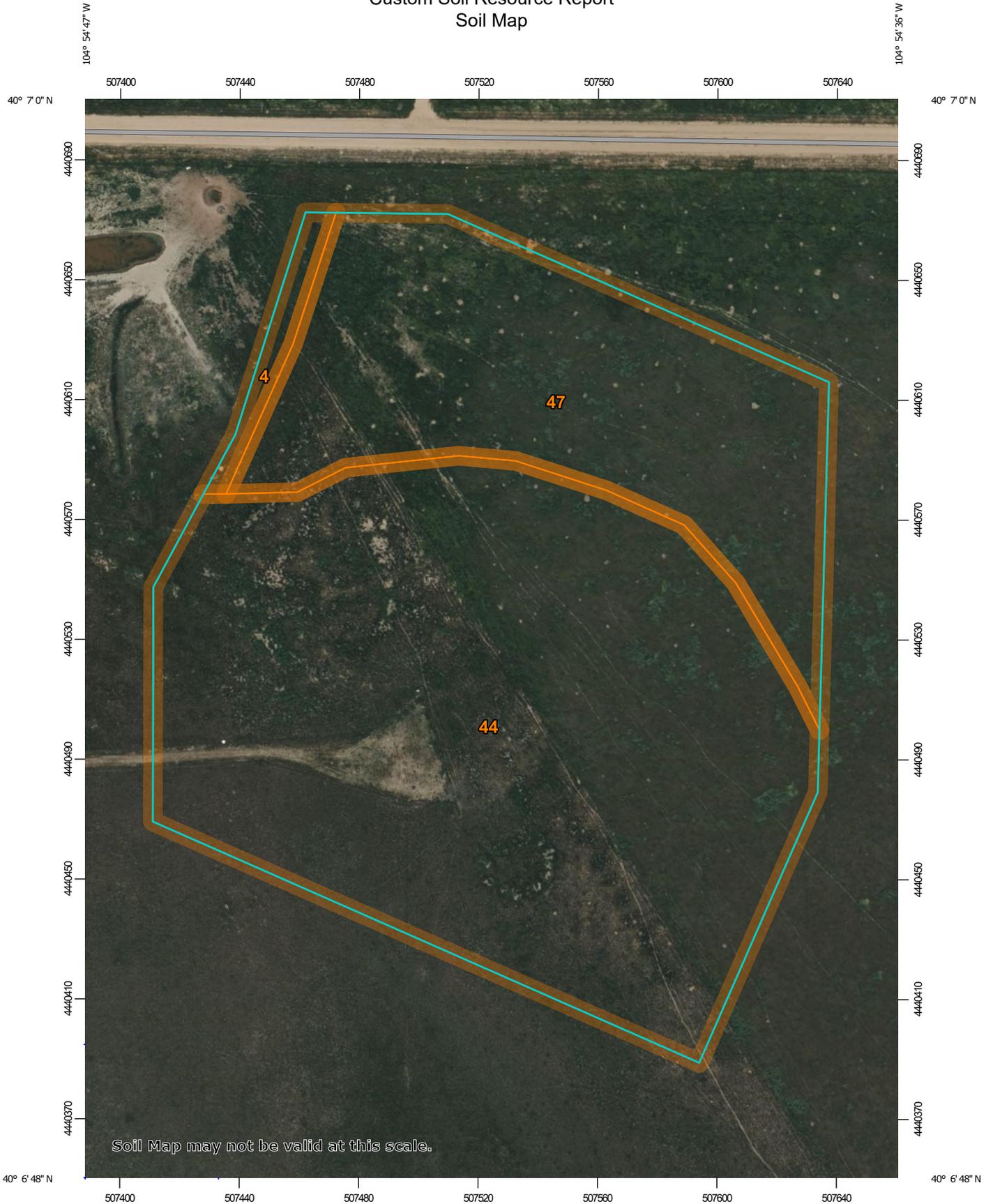
For maintenance items discovered at active construction locations, action, and documentation towards completing repairs identified at the time of inspection, shall be made within 24 hours of discovery.

Maintenance items discovered post-construction will be documented and coordinate with production personnel.

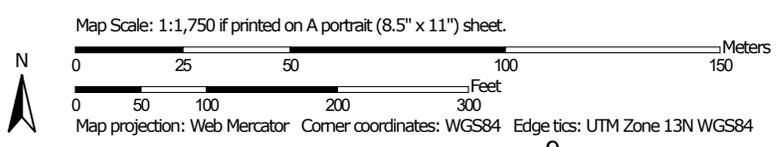
Timeline for completion of maintenance items is a priority and will depend on scope; but in all cases, shall not be completed until field conditions allow for safe access, and utility clearance has been confirmed for actions requiring ground disturbance / earthwork.

**APPENDIX A**  
**SOIL PROPERTIES AND MAP**

# Custom Soil Resource Report Soil Map



Soil Map may not be valid at this scale.



## Weld County, Colorado, Southern Part

### 4—Aquolls and Aquepts, flooded

#### Map Unit Setting

*National map unit symbol:* 3621

*Elevation:* 3,600 to 4,700 feet

*Mean annual precipitation:* 12 to 16 inches

*Mean annual air temperature:* 50 to 55 degrees F

*Frost-free period:* 100 to 165 days

*Farmland classification:* Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season

#### Map Unit Composition

*Aquolls and similar soils:* 55 percent

*Aquepts, flooded, and similar soils:* 25 percent

*Minor components:* 20 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Aquolls

##### Setting

*Landform:* Depressions, plains, drainageways

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* Recent alluvium

##### Typical profile

*H1 - 0 to 8 inches:* variable

*H2 - 8 to 60 inches:* stratified sandy loam to clay

##### Properties and qualities

*Slope:* 0 to 3 percent

*Depth to restrictive feature:* More than 80 inches

*Drainage class:* Poorly drained

*Runoff class:* Very low

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to high  
(0.06 to 6.00 in/hr)

*Depth to water table:* About 6 to 36 inches

*Frequency of flooding:* FrequentNone

*Frequency of ponding:* None

*Calcium carbonate, maximum content:* 10 percent

*Maximum salinity:* Moderately saline to strongly saline (8.0 to 16.0 mmhos/cm)

*Sodium adsorption ratio, maximum:* 5.0

*Available water supply, 0 to 60 inches:* Low (about 4.7 inches)

##### Interpretive groups

*Land capability classification (irrigated):* 6w

*Land capability classification (nonirrigated):* 6w

*Hydrologic Soil Group:* D

*Ecological site:* R067BY035CO - Salt Meadow

*Hydric soil rating:* Yes

## Description of Aquepts, Flooded

### Setting

*Landform:* Stream terraces  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Recent alluvium

### Typical profile

*H1 - 0 to 8 inches:* variable  
*H2 - 8 to 60 inches:* stratified sandy loam to clay

### Properties and qualities

*Slope:* 0 to 3 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Poorly drained  
*Runoff class:* Very low  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to high  
(0.06 to 6.00 in/hr)  
*Depth to water table:* About 6 to 36 inches  
*Frequency of flooding:* FrequentNone  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 10 percent  
*Maximum salinity:* Moderately saline to strongly saline (8.0 to 16.0 mmhos/cm)  
*Sodium adsorption ratio, maximum:* 5.0  
*Available water supply, 0 to 60 inches:* Low (about 4.7 inches)

### Interpretive groups

*Land capability classification (irrigated):* 6w  
*Land capability classification (nonirrigated):* 6w  
*Hydrologic Soil Group:* D  
*Ecological site:* R067BY038CO - Wet Meadow  
*Hydric soil rating:* Yes

## Minor Components

### Thedalund

*Percent of map unit:* 10 percent  
*Hydric soil rating:* No

### Haverson

*Percent of map unit:* 10 percent  
*Hydric soil rating:* No

## 44—Olney loamy sand, 1 to 3 percent slopes

### Map Unit Setting

*National map unit symbol:* 362r  
*Elevation:* 4,600 to 5,200 feet  
*Mean annual precipitation:* 11 to 15 inches

## Custom Soil Resource Report

*Mean annual air temperature:* 46 to 54 degrees F  
*Frost-free period:* 125 to 175 days  
*Farmland classification:* Farmland of statewide importance

### Map Unit Composition

*Olney and similar soils:* 85 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Olney

#### Setting

*Landform:* Plains  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Mixed deposit outwash

#### Typical profile

*H1 - 0 to 10 inches:* loamy sand  
*H2 - 10 to 20 inches:* sandy clay loam  
*H3 - 20 to 25 inches:* sandy clay loam  
*H4 - 25 to 60 inches:* fine sandy loam

#### Properties and qualities

*Slope:* 1 to 3 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Well drained  
*Runoff class:* Low  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high  
(0.60 to 2.00 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 15 percent  
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water supply, 0 to 60 inches:* Moderate (about 6.5 inches)

#### Interpretive groups

*Land capability classification (irrigated):* 3e  
*Land capability classification (nonirrigated):* 4c  
*Hydrologic Soil Group:* B  
*Ecological site:* R067BY024CO - Sandy Plains  
*Hydric soil rating:* No

### Minor Components

#### Vona

*Percent of map unit:* 8 percent  
*Hydric soil rating:* No

#### Zigweid

*Percent of map unit:* 7 percent  
*Hydric soil rating:* No

## 47—Olney fine sandy loam, 1 to 3 percent slopes

### Map Unit Setting

*National map unit symbol:* 362v

*Elevation:* 4,600 to 5,200 feet

*Mean annual precipitation:* 11 to 15 inches

*Mean annual air temperature:* 46 to 54 degrees F

*Frost-free period:* 125 to 175 days

*Farmland classification:* Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60

### Map Unit Composition

*Olney and similar soils:* 85 percent

*Minor components:* 15 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Olney

#### Setting

*Landform:* Plains

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* Mixed deposit outwash

#### Typical profile

*H1 - 0 to 10 inches:* fine sandy loam

*H2 - 10 to 20 inches:* sandy clay loam

*H3 - 20 to 25 inches:* sandy clay loam

*H4 - 25 to 60 inches:* fine sandy loam

#### Properties and qualities

*Slope:* 1 to 3 percent

*Depth to restrictive feature:* More than 80 inches

*Drainage class:* Well drained

*Runoff class:* Low

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high  
(0.57 to 2.00 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Calcium carbonate, maximum content:* 15 percent

*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

*Available water supply, 0 to 60 inches:* Moderate (about 7.0 inches)

#### Interpretive groups

*Land capability classification (irrigated):* 3e

*Land capability classification (nonirrigated):* 4c

*Hydrologic Soil Group:* B

*Ecological site:* R067BY024CO - Sandy Plains

*Hydric soil rating:* No

## Custom Soil Resource Report

### Minor Components

#### **Zigweid**

*Percent of map unit: 10 percent*

*Hydric soil rating: No*

#### **Vona**

*Percent of map unit: 5 percent*

*Hydric soil rating: No*

**APPENDIX B**

**SEED MIX**

FORM 2B INTERIM RECLAMATION PLAN  
(Appendix A): Seed Mix

Project/Site Name	Location	Existing Vegetation	Operator ID
Clover 2-29HZ	T 2N: 67W Sec 29: NWNE	Existing vegetation on the subject property is a dryland pasture	47120

**Landowner Requested Seed Mix**

**Custom Dryland Mix (Initial)**

Species	% Mix
Triticale (quickgard)	20
Perennial ryegrass	16
Smooth brome	12
Intermediate wheatgrass	12
Pubescent wheatgrass	12
Buffalo grass	2
Sideoats grama	6
Blue grama	2
Switchgrass	16
Rocky Mountain bee plant	2
*Drill Seed rate of 15 PLS LBS/Acre	

**APPENDIX C**

**INTERIM RECLAMATION GRADING PLAN**

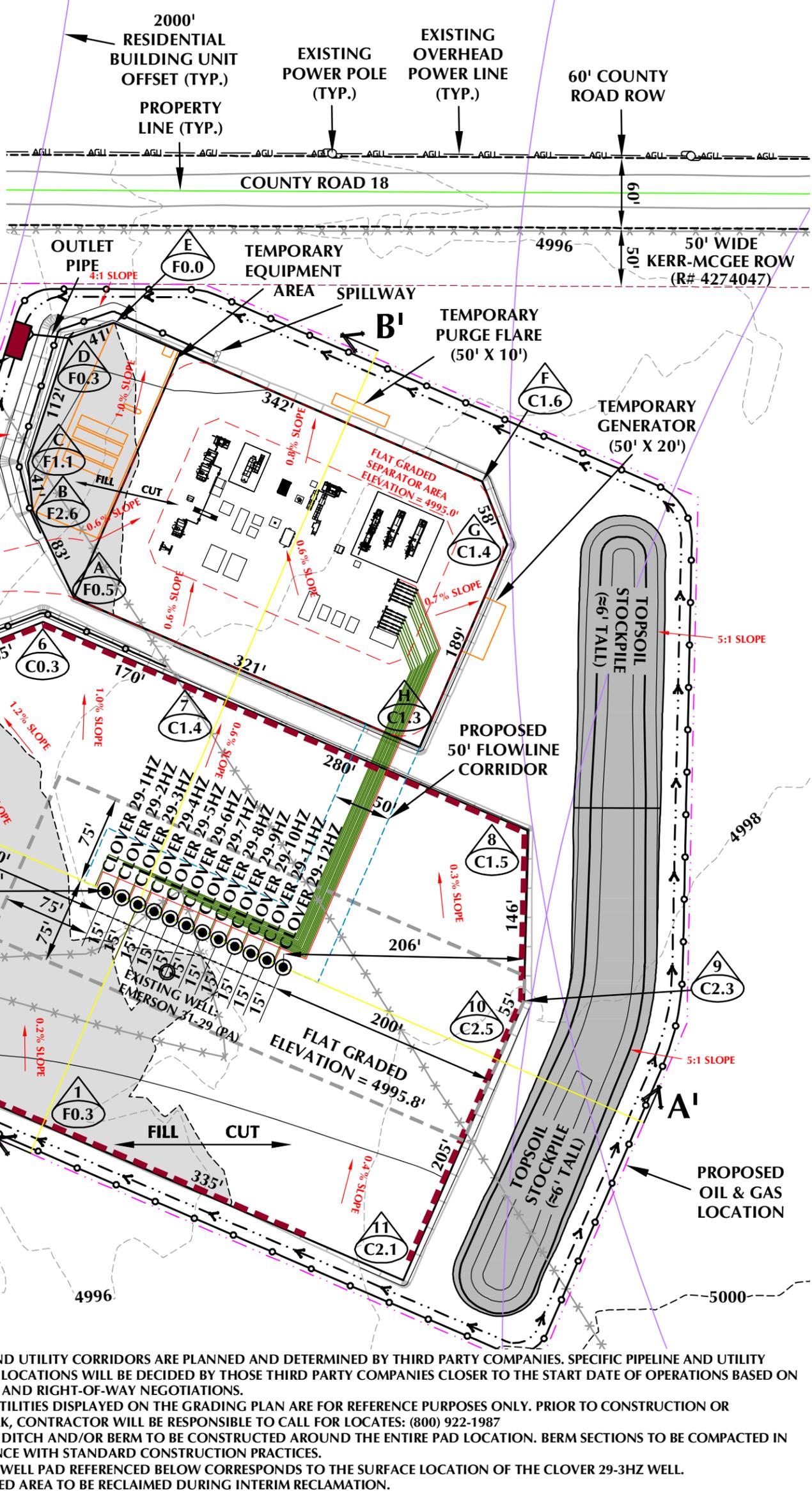
**FACILITY PAD - CLOVER 2-29HZ  
FACILITY DESIGN SUMMARY**

**PAD QUANTITIES AND DESIGN PARAMETERS**

CUT SLOPES = 5:1  
 FILL SLOPES = 5:1; EXCEPT AS NOTED  
 SHRINKAGE FACTOR = 1.10  
 SWELL FACTOR = 1.00  
 GRADED FACILITY PAD AREA = 2.04 ACRES  
 TOTAL FACILITY PAD AREA = 2.33 ACRES

**FACILITY PAD QUANTITIES**

TOTAL CUT FOR FACILITY PAD = 1,481 C.Y.  
 TOTAL FILL FOR FACILITY PAD = 1,481 C.Y.  
 TOPSOIL @ 6" DEPTH = 1,880 C.Y.  
 TOTAL IMPORT = 0 C.Y.



WELL NAME:	C/F
CLOVER 29-1HZ	C0.0
CLOVER 29-2HZ	C0.3
CLOVER 29-3HZ	C0.5
CLOVER 29-4HZ	C0.3
CLOVER 29-5HZ	C0.3
CLOVER 29-6HZ	C0.2
CLOVER 29-7HZ	C0.4
CLOVER 29-8HZ	C0.4
CLOVER 29-9HZ	C0.5
CLOVER 29-10HZ	C0.5
CLOVER 29-11HZ	C0.5
CLOVER 29-12HZ	C0.6

**NOTES:**

- PIPELINE AND UTILITY CORRIDORS ARE PLANNED AND DETERMINED BY THIRD PARTY COMPANIES. SPECIFIC PIPELINE AND UTILITY CORRIDOR LOCATIONS WILL BE DECIDED BY THOSE THIRD PARTY COMPANIES CLOSER TO THE START DATE OF OPERATIONS BASED ON CONTRACT AND RIGHT-OF-WAY NEGOTIATIONS.
- EXISTING UTILITIES DISPLAYED ON THE GRADING PLAN ARE FOR REFERENCE PURPOSES ONLY. PRIOR TO CONSTRUCTION OR EARTHWORK, CONTRACTOR WILL BE RESPONSIBLE TO CALL FOR LOCATES: (800) 922-1987
- DIVERSION DITCH AND/OR BERM TO BE CONSTRUCTED AROUND THE ENTIRE PAD LOCATION. BERM SECTIONS TO BE COMPACTED IN ACCORDANCE WITH STANDARD CONSTRUCTION PRACTICES.
- CENTER OF WELL PAD REFERENCED BELOW CORRESPONDS TO THE SURFACE LOCATION OF THE CLOVER 29-3HZ WELL.
- FLAT GRADED AREA TO BE RECLAIMED DURING INTERIM RECLAMATION.

**WELL PAD - CLOVER 2-29HZ DESIGN SUMMARY**

**WELL PAD QUANTITIES AND DESIGN PARAMETERS**

EXISTING GRADE @ CENTER OF WELL PAD = 4996.3'  
 FINISHED GRADE ELEVATION = 4995.8'  
 CUT SLOPES = 3:1  
 FILL SLOPES = 3:1  
 SHRINKAGE FACTOR = 1.10  
 SWELL FACTOR = 1.00  
 GRADED WELL PAD SURFACE AREA = 4.87 ACRES  
 TOTAL WELL PAD AREA = 5.16 ACRES  
 PROPOSED OIL & GAS LOCATION = 11.71 ACRES

**WELL PAD QUANTITIES**

TOTAL CUT FOR WELL PAD = 3,457 C.Y.  
 TOTAL FILL FOR WELL PAD = 3,457 C.Y.  
 TOPSOIL @ 6" DEPTH = 4,159 C.Y.  
 IMPORT MATERIAL = 0 C.Y.

**DRAFT**

**LEGEND**

- EXISTING WELL LOCATION
- PROPOSED WELL LOCATION
- - - EXISTING CONTOURS (2' INTERVAL)
- - - PROPOSED CONTOURS (2' INTERVAL)
- EPL - EXISTING PIPELINE
- - - PROPOSED FLOWLINE
- - - EXISTING FENCE
- - - PUE - PROPOSED UNDERGROUND ELECTRIC LINE
- - - PROPOSED SOUND MITIGATION
- - - DIVERSION DITCH
- - - BERM

**SCALE:** 1"=100' **DATE:** 1/5/23 **SHEET NO:** 1 OF 1

**REVISIONS:** SRS 5/16/23

**PAD - CLOVER 2-29HZ**

**PAD - GRADING PLAN**  
 CLOVER 29-1HZ, CLOVER 29-2HZ, CLOVER 29-3HZ,  
 CLOVER 29-4HZ, CLOVER 29-5HZ, CLOVER 29-6HZ,  
 CLOVER 29-7HZ, CLOVER 29-8HZ, CLOVER 29-9HZ,  
 CLOVER 29-10HZ, CLOVER 29-11HZ & CLOVER 29-12HZ  
 LOCATED IN SECTION 29, T2N, R67W, 6TH P.M.  
 WELD COUNTY, COLORADO

**Kerr-McGee Oil & Gas Onshore LP**  
 1099 18th Street  
 Denver, Colorado 80202

**609 CONSULTING, LLC**

LOVELAND OFFICE  
 6706 North Franklin Avenue  
 Loveland, Colorado 80538  
 Phone 970-776-4331

SHERIDAN OFFICE  
 1095 Saberton Avenue  
 Sheridan, Wyoming 82801  
 Phone 307-674-0609

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## **APPENDIX D**

### **SUMMARY OF SITE-SPECIFIC EROSION & SEDIMENT CONTROLS / BMPs**

## **SUMMARY OF SITE-SPECIFIC STORMWATER, EROSION & SEDIMENT CONTROLS / BMPs FOR INTERIM RECLAMATION PHASE**

Stormwater will be managed during the interim reclamation and production phase by a combination of site-specific erosion and sediment control measures including: a berm around the northern, eastern and southern perimeter of the facility pad and northern, southern, western, and eastern perimeter of the well pad to manage run-on and run-off; stabilization of slopes and associated topsoil stockpile(s) by seed and crimped mulch application; permanent culverts with inlet & outlet protection may be installed at access roads and crossing, as determined in the field during construction; a spillway and outlet along the western perimeter of the well pad berm and northwestern portion of the facility berm, which will remain in place until final reclamation. Post construction, daily inspections will be completed by on-site operations personnel. A third-party consultant will conduct stormwater compliance inspections every 30-days until final stabilization is achieved. Inspections will review all control measures / BMPs implemented, their status, and whether repair or replacement is needed, including weed maintenance when necessary. Maintenance and repair will be completed as soon as practicable, immediately in most cases.