



October 14, 2019

Kate Graves
Kerr-McGee Oil & Gas Onshore LP
501 N Division Blvd.
Platteville, Colorado 80651

**RE: Colorado Oil & Gas Conservation Commission (COGCC)
Vegetation Assessment Report (Interim Reclamation Completion Notice)
Camenisch 36-2 (318184)
Kerr-McGee Oil & Gas Onshore LP (Operator: 47120)**

Dear Ms. Graves:

Apex Companies, LLC (Apex) is presenting this letter to Kerr-McGee Oil & Gas Onshore LP (Kerr-McGee) documenting the results of a vegetation assessment that demonstrates successful completion of interim reclamation efforts, per COGCC Rule 1003, on the above-referenced location. Attached is a topographic location map and site map with additional location information.

Based on site visits and the completed vegetation assessment, Apex inspectors confirmed that the unused portions of the reduced production footprint have been stabilized and seeded with a mixture consistent with species composition and reseeding practices common to the area.

On July 16, 2019, modified step-point vegetation surveys were conducted on the reclaimed portion of the well pad, and on adjacent reference areas. Foliar and basal cover, along with non-vegetated and noxious weed occurrences, were documented; 100 survey points were recorded within the reclaimed disturbance and 100 survey points were recorded within the reference area. Vegetation survey points were identified using a bullseye target tool. The survey methodology employed by Apex is based on the *step-point method* described in an interagency technical reference published by the Bureau of Land Management (BLM, 1996).

Noxious weeds listed by the Colorado Department of Agriculture were excluded from the percent of reference vegetative coverage calculations, per COGCC Rule 1003.e (2). To ensure reclamation vegetative composition meets the standards of Kerr-McGee and the COGCC, undesirable cover is also quantified in the attached Summary of Field Data. Undesirable cover includes species identified by the United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS) as introduced and not native to the lower 48 states, and not considered beneficial for reclamation purposes.

Survey results indicate the reclaimed area has a foliar vegetative cover that is 102.6% of the reference area. Vegetation survey results are provided in the attached survey summary table and data sheets. Based on the results of the survey, interim reclamation, as defined by COGCC Rule 1003.e (2), has been achieved. Photographs required by COGCC Rule 1003.e (3) are also attached along with the site map illustrating vegetation survey efforts.

Apex appreciates the opportunity to provide environmental consulting services on this project. Should you have any questions or require additional information, please do not hesitate to contact me.

Sincerely,
Apex Companies, LLC



Adam Roll
Environmental Scientist
970-589-6111
Adam.Roll@apexcos.com

Attachments:

1. Vegetation Survey - Summary of Field Data
2. Topographic Location Map
3. Vegetation Survey Site Map
4. Vegetation Assessment Photo Log
5. Vegetation Survey (Field Data Tables)

Reference:

United States (U.S.) Department of Agriculture (USDA), Forest Service (USFS), Natural Resource Conservation Service (NRCS) and U.S. Department of the Interior (USDOI) Bureau of Land Management (BLM). "Sampling Vegetation Attributes, Interagency Technical Reference, 1996 (Revised in 1997, and 1999)". USDOI BLM Technical References #1734-4.
Date Accessed: 2 August, 2017

Vegetation Survey - Summary of Field Data

Client	Kerr-McGee
COGCC Location Name (ID)	Camenisch 36-2 (318184)
Assessment Date	7/16/2019
Inspector Name	Carolyn Craveiro De Sa

Based on the survey methodology, the foliar cover (%) in each survey area is calculated by summing the total number of foliar occurrences, excluding noxious weeds, and dividing by the total occurrences in the transects. For this location:

Reclaim Area (Foliar Cover)	Reference Area (Foliar Cover)
$(50 + 11 + 0) / 162 = 37.7\%$	$(53 + 2 + 3) / 158 = 36.7\%$

For the purposes of this assessment, the undesirable foliar cover (%) is calculated by summing the total number of undesirable* foliar occurrences and dividing by the total occurrences in the transects, excluding noxious weeds. For this location:

Reclaim Area (Undesirable Foliar Cover)	Reference Area (Undesirable Foliar Cover)
$3 / (50 + 11 + 0) = 4.9\%$	$0 / (53 + 2 + 3) = 0.0\%$

The percent of reference used to evaluate the reclamation area for compliance with COGCC Rule 1003.e(2) is calculated by dividing the foliar cover (%) in the reclaim area by the foliar cover (%) in the reference area. For this location:

Percent of Reference (Reclaim % / Reference %)
$37.7\% / 36.7\% = 102.6\%$

Reclaim Area Vegetation

Desirable Foliar Cover	35.80%
Desirable Basal Cover	14.20%
Non Vegetated	45.06%
Noxious Weeds Cover	3.09%
Undesirable Cover	1.85%
Quality Assurance Total <i>(must equal 100)</i>	100.00%
Grass (Foliar)	50
Forb (Foliar)	11
Shrubs (Foliar)	0
Noxious Weed (Foliar)	1
Grass (Basal)	20
Forb (Basal)	3
Shrubs (Basal)	0
Noxious Weed (Basal)	4
Bare Ground	25
Litter	48
Rock	0
Total Occurrences	162

Reference Area Vegetation

Desirable Foliar Cover	36.71%
Desirable Basal Cover	24.05%
Non Vegetated	39.24%
Noxious Weeds Cover	0.00%
Undesirable Cover	0.00%
Quality Assurance Total <i>(must equal 100)</i>	100.00%
Grass (Foliar)	53
Forb (Foliar)	2
Shrubs (Foliar)	3
Noxious Weed (Foliar)	0
Grass (Basal)	36
Forb (Basal)	1
Shrubs (Basal)	1
Noxious Weed (Basal)	0
Bare Ground	24
Litter	36
Rock	2
Total Occurrences	158

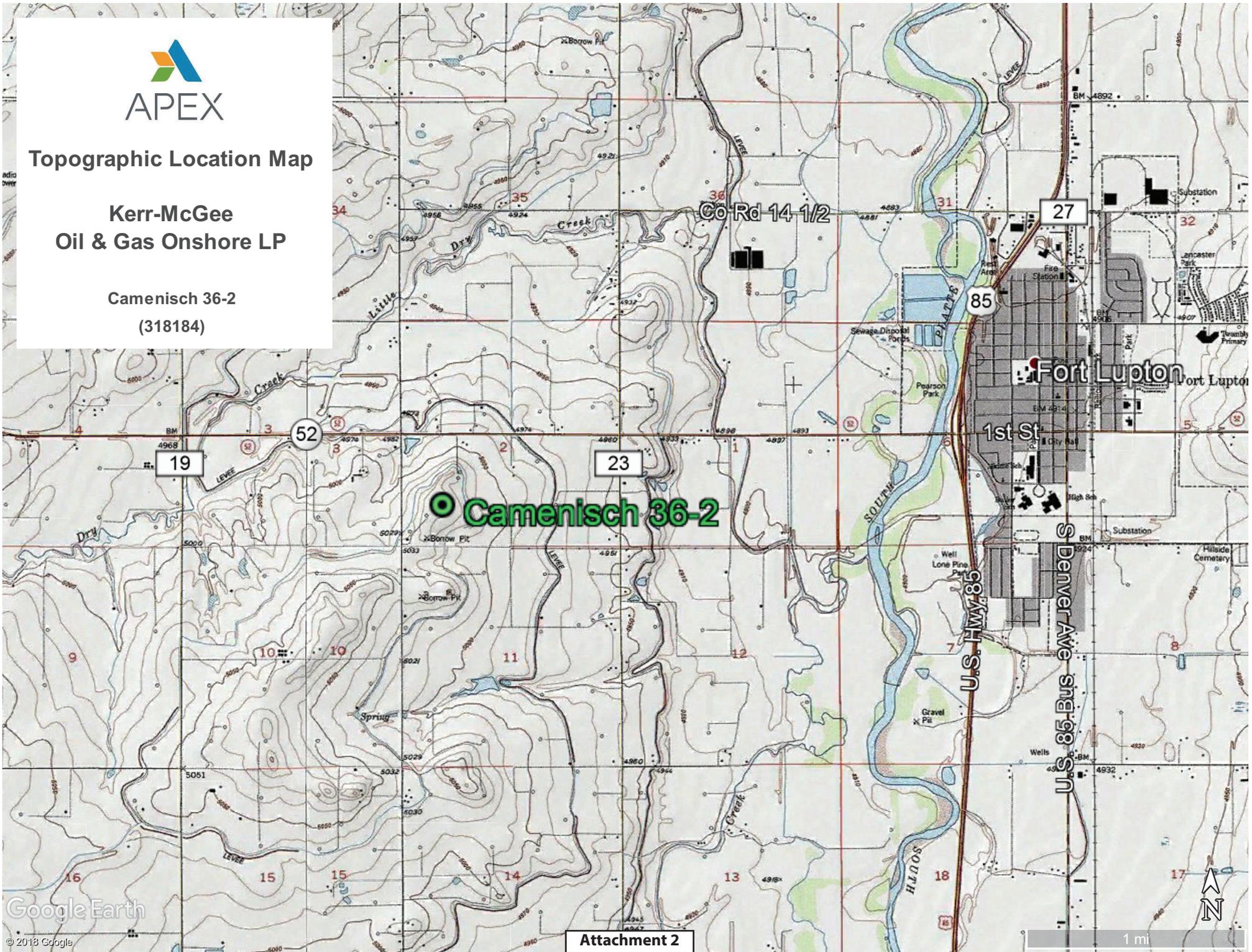
* Identified by the USDA NRCS as introduced and not native to the lower 48 states, and not considered beneficial for reclamation purposes.



Topographic Location Map

Kerr-McGee
Oil & Gas Onshore LP

Camenisch 36-2
(318184)

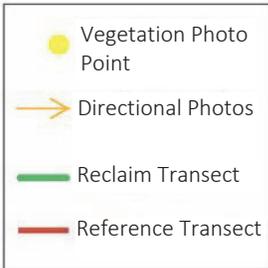




Vegetation Survey Site Map

Kerr-McGee Oil & Gas Onshore LP

**Camenisch 36-2
(318184)**



Legal Description: SWSW, Sec. 2, T1N-R67W

Lat./Long.: 40.075458 / -104.863856

County: Weld

Land Use: Non-Cropland

Reference Area Foliar Cover: 36.7%

Reclaim Area Foliar Cover: 37.7%

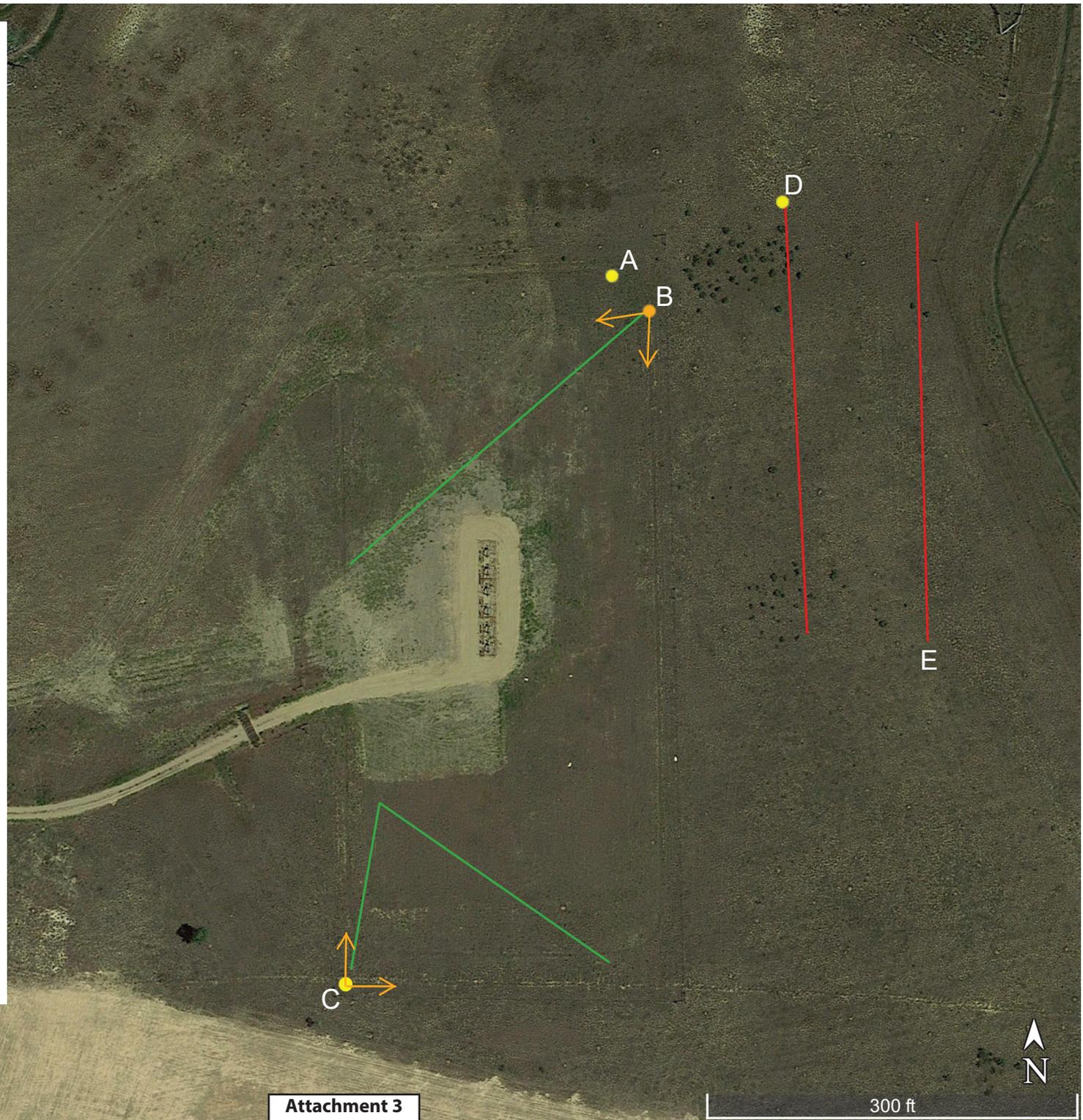
Cover Ratio (Reclaim/Reference): 102.6%

Inspector: Carolyn Craveiro de Sa

Assessment Date: 07/16/2019

Aerial Imagery Date: 05/31/2018

**Please reference coordinate disclaimer on the photo log pages.*



Vegetation Assessment Photo Log

Date Completed - 07/16/2019

Client - Kerr-McGee Oil & Gas Onshore LP

Location Name (ID) - Camenisch 36-2 (318184)



Photo Point A: Edge of Disturbance - Facing West

*Geographic coordinates provided in the borders of all attached photos are based on points identified by the mobile phone or tablet which collected the photo. Coordinate accuracy in this format is typically no greater than 5 meters, while the points illustrated in the site diagram associated with this submittal were collected with a high accuracy GPS unit with sub-meter accuracy. Discrepancies between the site diagram and photo coordinates will exist.

Vegetation Assessment Photo Log

Date Completed - 07/16/2019

Client - Kerr-McGee Oil & Gas Onshore LP

Location Name (ID) - Camenisch 36-2 (318184)



Photo Point B: North of Disturbance - Facing South



Photo Point C: South of Disturbance - Facing North



Photo Point C: West of Disturbance - Facing East



Photo Point B: East of Disturbance - Facing West

Vegetation Assessment Photo Log

Date Completed - 07/16/2019

Client - Kerr-McGee Oil & Gas Onshore LP

Location Name (ID) - Camenisch 36-2(318184)



Photo Point C: Reclaim Area Vegetation - Facing North

Vegetation Assessment Photo Log

Client - Kerr-McGee Oil & Gas Onshore LP

Date Completed - 07/16/2019

Location Name (ID) - Camenisch 36-2 (318184)



Photo Point C: Reclaim Transect 1 - Facing North

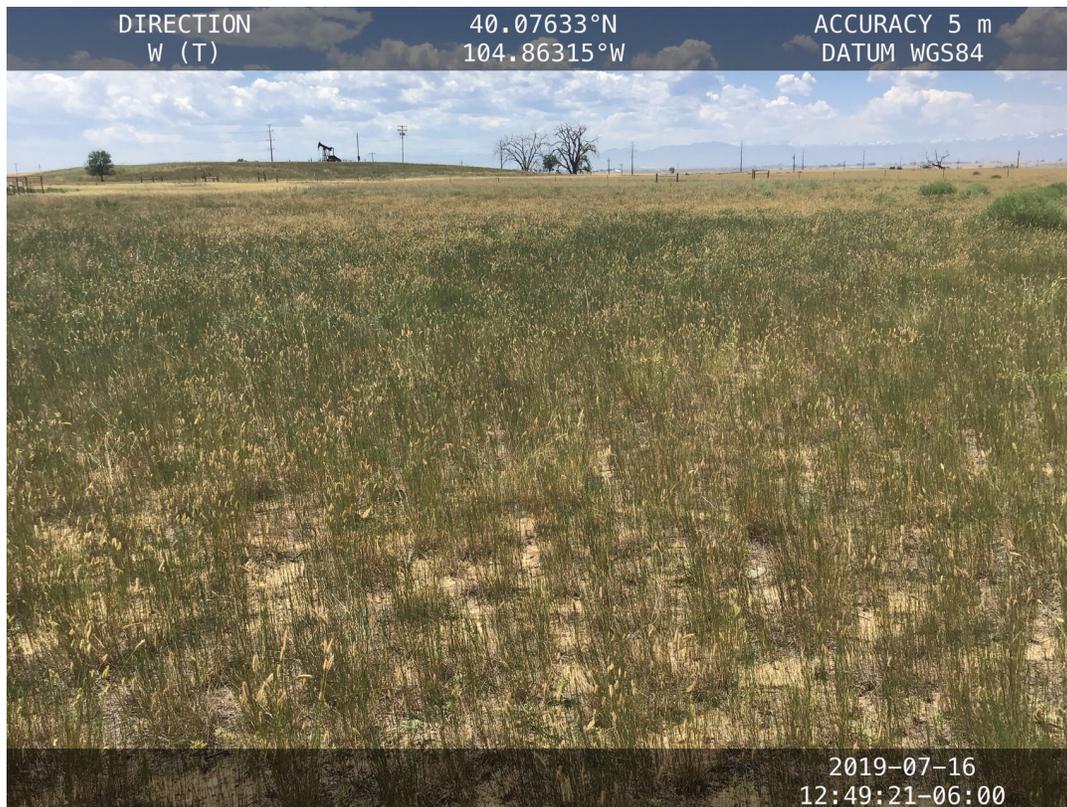


Photo Point B: Reclaim Transect 2 - Facing West

Vegetation Assessment Photo Log

Date Completed - 07/16/2019

Client - Kerr-McGee Oil & Gas Onshore LP

Location Name (ID) - Camenisch 36-2(318184)



Photo Point D: Reference Area Vegetation - Facing South

Vegetation Assessment Photo Log

Client - Kerr-McGee Oil & Gas Onshore LP

Date Completed - 07/16/2019

Location Name (ID) - Camenisch 36-2 (318184)



Photo Point D: Reference Transect 1 - Facing South



Transect Photo E: Reference Transect 2 - Facing North

Vegetation Survey (Field Data Table)

Client: Kerr-McGee
 COGCC Location Name (ID): Camenisch 36-2 (318184)
 Transect ID: Reclaim Transect 1
 Transect Length: 357 ft.
 Assessment Date: 7/16/2019
 Inspector: Carolyn Craveiro De Sa

Point	Foliar	Species	Basal	Species
1			Non Vegetative	Litter
2			Non Vegetative	Bare Ground
3	Grass	<i>Agropyron cristatum</i>	Non Vegetative	Litter
4	Grass	<i>Agropyron cristatum</i>	Grass	<i>Agropyron cristatum</i>
5			Non Vegetative	Litter
6			Non Vegetative	Litter
7	Grass	<i>Agropyron cristatum</i>	Non Vegetative	Litter
8	Grass	<i>Agropyron cristatum</i>	Non Vegetative	Litter
9	Grass	<i>Agropyron cristatum</i>	Non Vegetative	Litter
10	Grass	<i>Agropyron cristatum</i>	Non Vegetative	Litter
11			Non Vegetative	Litter
12	Forb	<i>Heterotheca spp.</i>	Forb	<i>Heterotheca spp.</i>
13	Grass	<i>Agropyron cristatum</i>	Grass	<i>Agropyron cristatum</i>
14	Grass	<i>Agropyron cristatum</i>	Grass	<i>Agropyron cristatum</i>
15			Non Vegetative	Bare Ground
16	Forb	<i>Heterotheca spp.</i>	Non Vegetative	Bare Ground
17			Non Vegetative	Litter
18	Grass	<i>Agropyron cristatum</i>	Grass	<i>Agropyron cristatum</i>
19	Grass	<i>Agropyron cristatum</i>	Non Vegetative	Litter
20	Forb	<i>Heterotheca spp.</i>	Forb	<i>Heterotheca spp.</i>
21	Forb	<i>Heterotheca spp.</i>	Non Vegetative	Litter
22	Grass	<i>Agropyron cristatum</i>	Non Vegetative	Litter
23			Non Vegetative	Litter
24			Non Vegetative	Litter
25	Grass	<i>Agropyron cristatum</i>	Non Vegetative	Litter
26			Non Vegetative	Litter
27	Forb	<i>Thlaspi arvense</i>	Non Vegetative	Bare Ground
28			Non Vegetative	Bare Ground
29	Grass	<i>Agropyron cristatum</i>	Grass	<i>Agropyron cristatum</i>
30			Non Vegetative	Bare Ground
31			Non Vegetative	Litter
32	Grass	<i>Agropyron cristatum</i>	Non Vegetative	Litter
33	Grass	<i>Agropyron cristatum</i>	Non Vegetative	Bare Ground
34	Grass	<i>Agropyron cristatum</i>	Non Vegetative	Bare Ground
35			Non Vegetative	Bare Ground
36	Grass	<i>Agropyron cristatum</i>	Non Vegetative	Litter
37	Grass	<i>Agropyron cristatum</i>	Grass	<i>Agropyron cristatum</i>
38			Non Vegetative	Bare Ground
39	Grass	<i>Agropyron cristatum</i>	Grass	<i>Agropyron cristatum</i>
40			Non Vegetative	Bare Ground
41	Grass	<i>Agropyron cristatum</i>	Grass	<i>Agropyron cristatum</i>
42			Non Vegetative	Bare Ground
43	Grass	<i>Agropyron cristatum</i>	Non Vegetative	Bare Ground
44	Grass	<i>Agropyron cristatum</i>	Non Vegetative	Litter
45			Non Vegetative	Litter
46	Grass	<i>Agropyron cristatum</i>	Grass	<i>Agropyron cristatum</i>
47			Non Vegetative	Litter
48			Non Vegetative	Litter
49	Grass	<i>Agropyron cristatum</i>	Grass	<i>Agropyron cristatum</i>
50			Non Vegetative	Litter

Vegetation Survey (Field Data Table)

Client: Kerr-McGee
 COGCC Location Name (ID): Camenisch 36-2 (318184)
 Transect ID: Reclaim Transect 2
 Transect Length: 315 ft.
 Assessment Date: 7/16/2019
 Inspector: Carolyn Craveiro De Sa

Point	Foliar	Species	Basal	Species
1	Grass	<i>Agropyron cristatum</i>	Grass	<i>Agropyron cristatum</i>
2			Non Vegetative	Litter
3			Non Vegetative	Bare Ground
4	Grass	<i>Agropyron cristatum</i>	Non Vegetative	Litter
5			Non Vegetative	Litter
6	Grass	<i>Agropyron cristatum</i>	Grass	<i>Agropyron cristatum</i>
7	Grass	<i>Agropyron cristatum</i>	Grass	<i>Agropyron cristatum</i>
8			Non Vegetative	Bare Ground
9			Non Vegetative	Litter
10	Grass	<i>Agropyron cristatum</i>	Non Vegetative	Litter
11	Forb	<i>Heterotheca spp.</i>	Forb	<i>Heterotheca spp.</i>
12	Grass	<i>Thinopyrum intermedia</i>	Non Vegetative	Litter
13	Grass	<i>Agropyron cristatum</i>	Non Vegetative	Litter
14			Non Vegetative	Bare Ground
15			Non Vegetative	Litter
16	Grass	<i>Agropyron cristatum</i>	Grass	<i>Agropyron cristatum</i>
17	Grass	<i>Thinopyrum intermedia</i>	Grass	<i>Bromus inermis</i>
18			Non Vegetative	Litter
19	Grass	<i>Thinopyrum intermedia</i>	Non Vegetative	Litter
20	Grass	<i>Bromus inermis</i>	Non Vegetative	Bare Ground
21			Non Vegetative	Bare Ground
22	Forb	<i>Heterotheca spp.</i>	Non Vegetative	Bare Ground
23	Forb	<i>Ambrosia psilostachya</i>	Non Vegetative	Litter
24	Grass	<i>Thinopyrum intermedia</i>	Noxious Weed C	<i>Bromus tectorum</i>
25	Grass	<i>Agropyron cristatum</i>	Grass	<i>Agropyron cristatum</i>
26			Non Vegetative	Litter
27			Non Vegetative	Litter
28	Grass	<i>Agropyron cristatum</i>	Non Vegetative	Litter
29	Grass	<i>Thinopyrum intermedia</i>	Noxious Weed C	<i>Bromus tectorum</i>
30	Forb	<i>Chenopodium album</i>	Non Vegetative	Bare Ground
31	Grass	<i>Thinopyrum intermedia</i>	Non Vegetative	Litter
32	Grass	<i>Bromus inermis</i>	Non Vegetative	Litter
33			Non Vegetative	Bare Ground
34			Non Vegetative	Litter
35	Grass	<i>Bromus inermis</i>	Grass	<i>Thinopyrum intermedia</i>
36			Non Vegetative	Litter
37	Grass	<i>Agropyron cristatum</i>	Non Vegetative	Litter
38			Non Vegetative	Litter
39	Grass	<i>Agropyron cristatum</i>	Non Vegetative	Bare Ground
40	Forb	<i>Kochia scoparia</i>	Non Vegetative	Bare Ground
41	Forb	<i>Helianthus petiolaris</i>	Noxious Weed C	<i>Bromus tectorum</i>
42			Non Vegetative	Bare Ground
43	Grass	<i>Bromus inermis</i>	Grass	<i>Bromus inermis</i>
44			Non Vegetative	Bare Ground
45	Grass	<i>Bromus inermis</i>	Grass	<i>Thinopyrum intermedia</i>
46	Grass	<i>Agropyron cristatum</i>	Non Vegetative	Litter
47	Grass	<i>Bromus inermis</i>	Noxious Weed C	<i>Bromus tectorum</i>
48	Noxious Weed C	<i>Bromus tectorum</i>	Non Vegetative	Litter
49	Grass	<i>Agropyron cristatum</i>	Grass	<i>Agropyron cristatum</i>
50	Grass	<i>Agropyron cristatum</i>	Non Vegetative	Litter

Vegetation Survey (Field Data Table)

Client: Kerr-McGee
 COGCC Location Name (ID): Camenisch 36-2 (318184)
 Transect ID: Reference Transect 1
 Transect Length: 350 ft.
 Assessment Date: 7/16/2019
 Inspector: Carolyn Craveiro De Sa

Point	Foliar	Species	Basal	Species
1	Grass	<i>Agropyron cristatum</i>	Grass	<i>Agropyron cristatum</i>
2			Non Vegetative	Bare Ground
3	Grass	<i>Agropyron cristatum</i>	Grass	<i>Agropyron cristatum</i>
4			Non Vegetative	Litter
5			Non Vegetative	Litter
6	Grass	<i>Agropyron cristatum</i>	Grass	<i>Agropyron cristatum</i>
7	Grass	<i>Agropyron cristatum</i>	Grass	<i>Agropyron cristatum</i>
8			Non Vegetative	Litter
9	Shrub	<i>Chrysothamnus viscidiflorus</i>	Shrub	<i>Chrysothamnus viscidiflorus</i>
10			Non Vegetative	Litter
11			Non Vegetative	Litter
12	Grass	<i>Agropyron cristatum</i>	Grass	<i>Agropyron cristatum</i>
13			Non Vegetative	Bare Ground
14	Grass	<i>Agropyron cristatum</i>	Grass	<i>Agropyron cristatum</i>
15	Grass	<i>Agropyron cristatum</i>	Non Vegetative	Litter
16	Grass	<i>Agropyron cristatum</i>	Non Vegetative	Litter
17			Non Vegetative	Bare Ground
18			Non Vegetative	Bare Ground
19	Shrub	<i>Chrysothamnus viscidiflorus</i>	Grass	<i>Agropyron cristatum</i>
20			Non Vegetative	Bare Ground
21	Grass	<i>Agropyron cristatum</i>	Non Vegetative	Litter
22	Grass	<i>Agropyron cristatum</i>	Non Vegetative	Bare Ground
23	Grass	<i>Agropyron cristatum</i>	Non Vegetative	Bare Ground
24	Grass	<i>Agropyron cristatum</i>	Grass	<i>Agropyron cristatum</i>
25			Non Vegetative	Rock
26	Shrub	<i>Chrysothamnus viscidiflorus</i>	Non Vegetative	Litter
27			Non Vegetative	Bare Ground
28	Grass	<i>Agropyron cristatum</i>	Grass	<i>Agropyron cristatum</i>
29			Non Vegetative	Litter
30	Grass	<i>Agropyron cristatum</i>	Grass	<i>Agropyron cristatum</i>
31	Grass	<i>Agropyron cristatum</i>	Grass	<i>Agropyron cristatum</i>
32	Grass	<i>Agropyron cristatum</i>	Non Vegetative	Litter
33	Grass	<i>Agropyron cristatum</i>	Grass	<i>Agropyron cristatum</i>
34	Grass	<i>Agropyron cristatum</i>	Non Vegetative	Litter
35	Grass	<i>Agropyron cristatum</i>	Grass	<i>Agropyron cristatum</i>
36			Non Vegetative	Litter
37	Grass	<i>Agropyron cristatum</i>	Non Vegetative	Litter
38	Grass	<i>Agropyron cristatum</i>	Grass	<i>Agropyron cristatum</i>
39	Grass	<i>Agropyron cristatum</i>	Grass	<i>Agropyron cristatum</i>
40	Grass	<i>Agropyron cristatum</i>	Grass	<i>Agropyron cristatum</i>
41	Grass	<i>Agropyron cristatum</i>	Grass	<i>Agropyron cristatum</i>
42			Non Vegetative	Bare Ground
43			Non Vegetative	Litter
44	Grass	<i>Agropyron cristatum</i>	Grass	<i>Agropyron cristatum</i>
45			Non Vegetative	Bare Ground
46			Non Vegetative	Bare Ground
47	Grass	<i>Agropyron cristatum</i>	Non Vegetative	Litter
48			Non Vegetative	Bare Ground
49	Grass	<i>Agropyron cristatum</i>	Grass	<i>Agropyron cristatum</i>
50			Non Vegetative	Litter

Vegetation Survey (Field Data Table)

Client: Kerr-McGee
 COGCC Location Name (ID): Camenisch 36-2 (318184)
 Transect ID: Reference Transect 2
 Transect Length: 337 ft.
 Assessment Date: 7/16/2019
 Inspector: Carolyn Craveiro De Sa

Point	Foliar	Species	Basal	Species
1	Grass	<i>Bromus inermis</i>	Grass	<i>Agropyron cristatum</i>
2	Grass	<i>Agropyron cristatum</i>	Non Vegetative	Bare Ground
3			Non Vegetative	Litter
4	Forb	<i>Heterotheca spp.</i>	Forb	<i>Heterotheca spp.</i>
5			Non Vegetative	Bare Ground
6			Non Vegetative	Bare Ground
7	Grass	<i>Agropyron cristatum</i>	Grass	<i>Agropyron cristatum</i>
8			Non Vegetative	Litter
9	Grass	<i>Agropyron cristatum</i>	Non Vegetative	Litter
10			Non Vegetative	Bare Ground
11	Grass	<i>Agropyron cristatum</i>	Grass	<i>Agropyron cristatum</i>
12			Non Vegetative	Litter
13			Non Vegetative	Litter
14	Grass	<i>Agropyron cristatum</i>	Non Vegetative	Litter
15			Non Vegetative	Bare Ground
16			Non Vegetative	Litter
17			Non Vegetative	Litter
18			Non Vegetative	Litter
19			Non Vegetative	Bare Ground
20			Non Vegetative	Bare Ground
21	Grass	<i>Agropyron cristatum</i>	Grass	<i>Agropyron cristatum</i>
22			Non Vegetative	Litter
23	Grass	<i>Agropyron cristatum</i>	Grass	<i>Agropyron cristatum</i>
24			Non Vegetative	Litter
25	Grass	<i>Agropyron cristatum</i>	Grass	<i>Agropyron cristatum</i>
26	Grass	<i>Agropyron cristatum</i>	Grass	<i>Agropyron cristatum</i>
27	Forb	<i>Heterotheca spp.</i>	Non Vegetative	Bare Ground
28	Grass	<i>Agropyron cristatum</i>	Non Vegetative	Litter
29	Grass	<i>Agropyron cristatum</i>	Non Vegetative	Litter
30	Grass	<i>Bromus inermis</i>	Non Vegetative	Bare Ground
31	Grass	<i>Agropyron cristatum</i>	Grass	<i>Agropyron cristatum</i>
32	Grass	<i>Agropyron cristatum</i>	Non Vegetative	Litter
33			Non Vegetative	Litter
34	Grass	<i>Agropyron cristatum</i>	Grass	<i>Agropyron cristatum</i>
35	Grass	<i>Agropyron cristatum</i>	Grass	<i>Agropyron cristatum</i>
36	Grass	<i>Agropyron cristatum</i>	Grass	<i>Agropyron cristatum</i>
37			Non Vegetative	Litter
38			Non Vegetative	Rock
39	Grass	<i>Agropyron cristatum</i>	Non Vegetative	Bare Ground
40	Grass	<i>Agropyron cristatum</i>	Grass	<i>Agropyron cristatum</i>
41	Grass	<i>Agropyron cristatum</i>	Grass	<i>Agropyron cristatum</i>
42			Non Vegetative	Litter
43	Grass	<i>Agropyron cristatum</i>	Grass	<i>Agropyron cristatum</i>
44			Non Vegetative	Bare Ground
45	Grass	<i>Agropyron cristatum</i>	Grass	<i>Agropyron cristatum</i>
46	Grass	<i>Agropyron cristatum</i>	Grass	<i>Agropyron cristatum</i>
47			Non Vegetative	Bare Ground
48	Grass	<i>Agropyron cristatum</i>	Grass	<i>Agropyron cristatum</i>
49			Non Vegetative	Litter
50	Grass	<i>Agropyron cristatum</i>	Non Vegetative	Litter