



January 30, 2017

Mr. Mike Dinkel, REM, CSEM  
Kerr-McGee Oil & Gas Onshore LP  
1099 18th Street, Suite 1800  
Denver, Colorado 80202

**RE: Colorado Oil & Gas Conservation Commission (COGCC)  
Form 4 (Interim Reclamation Completion Notice)  
DOLPH 15C-1HZ (336495)  
Kerr-McGee Oil & Gas Onshore LP (Operator: 47120)**

Dear Mr. Dinkel:

Apex Companies, LLC (Apex) is pleased to present 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 in Weld County, Colorado. Attached is a topographic location map, which identifies the referenced location.

Based on communications with Kerr-McGee personnel and subsequent site visits, Apex inspectors confirmed that the unused portions of the reduced production footprint have been stabilized and seeded with Dryland Pasture/ Sandy Soil Mix. This seed mixture was applied at 20 pounds pure live seed (pls) per acre, and is composed of Tetraploid Perennial Ryegrass (9.84%), Smooth Brome, Lincoln (9.33%), Sandberg Bluegrass (7.5%), Intermediate Wheatgrass (7.5%), Sand Dropseed (7.5%), Indian Ricegrass (7.5%), Green Needlegrass (7.5%), Sideoats Grama (7.5%), Intermediate Wheatgrass, Oahe (7.38%), Dahurian Wildrye (7.22%), Orchardgrass, Paiute (7.145%), Pubescent Wheatgrass Luna (6.675%), Switchgrass (5.00%), and Inert-Other (2.41%).

On July 6, 2016, 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. Noxious weeds listed by the Colorado Department of Agriculture were excluded from the vegetative coverage calculation.

Survey results indicate the reclaimed area has a foliar vegetative cover that is 96.16% of the reference area. Vegetation survey results are provided in the attached survey summary tables 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 a diagram illustrating vegetation survey efforts.

Apex appreciates the opportunity to provide environmental consulting services to Kerr-McGee with this project. Should you have any questions or require additional information, please don't hesitate to contact me.

Sincerely,  
**Apex Companies, LLC**

A handwritten signature in black ink, appearing to read 'Chris Hines', written over a horizontal line.

Chris Hines  
Project Manager  
970-261-1127  
[chris.hines@apexcos.com](mailto:chris.hines@apexcos.com)

Attachments:

1. Vegetation Survey (Summary of Field Data)
2. Vegetation Survey Site Map
3. Topographic Location Map
4. Vegetation Survey (Photos)
5. Vegetation Survey (Field Data Tables)



## Vegetation Survey (Summary of Field Data)

<b>Client</b>	Kerr-McGee Oil & Gas Onshore LP
<b>COGCC Location Name (ID)</b>	DOLPH 15C-1HZ (336495)
<b>Assessment Date</b>	7/6/2016
<b>Inspector Name - Title</b>	Jennie Schoedel - Environmental Scientist
<b>Data Processor Name - Title</b>	Jennie Schoedel - Environmental Scientist

Based on the survey methodology, the Foliar Cover % in each survey area is calculated by summing the total number of foliar occurrences, minus noxious weeds, and dividing by the total occurrences in the transect. For this location:

<b>Reclaim Area (Foliar Cover)</b>	<b>Reference Area (Foliar Cover)</b>
$(17 + 7 + 0) / 135 =$ <b>17.78%</b>	$(16 + 11 + 0) / 146 =$ <b>18.49%</b>

The Percent of Reference (%) used to evaluate each reclaim area for compliance with COGCC Rule 1003.e(2) for determining interim reclamation success, is calculated by dividing the Foliar Cover % in the Reclaim Area by the Foliar Cover % in the Reference Area. For this location:

<b>Percent of Reference (Reclaim % / Reference %)</b>
$17.78\% / 18.49\% =$ <b>96.16%</b>

### Reclaim Area Vegetation

Foliar Cover	17.78%
Basal Cover	2.22%
Non Vegetated	71.85%
Noxious Weeds	8.15%
<b>QA Total</b> <i>(must equal 100)</i>	<b>100.00%</b>
Grass (Foliar)	17
Forb (Foliar)	7
Shrubs (Foliar)	0
Noxious Weed (Foliar)	11
Grass (Basal)	1
Forb (Basal)	2
Shrubs (Basal)	0
Noxious Weed (Basal)	0
Bare Ground	39
Litter	58
Rock	0
<b>Total Occurrences</b>	<b>135</b>

### Reference Area Vegetation

Foliar Cover	18.49%
Basal Cover	2.05%
Non Vegetated	65.75%
Noxious Weeds	13.70%
<b>QA Total</b> <i>(must equal 100)</i>	<b>100.00%</b>
Grass (Foliar)	16
Forb (Foliar)	11
Shrubs (Foliar)	0
Noxious Weed (Foliar)	19
Grass (Basal)	2
Forb (Basal)	1
Shrubs (Basal)	0
Noxious Weed (Basal)	1
Bare Ground	12
Litter	84
Rock	0
<b>Total Occurrences</b>	<b>146</b>

**Vegetation Survey Site Map**

DOLPH 15C-1HZ

(336495)

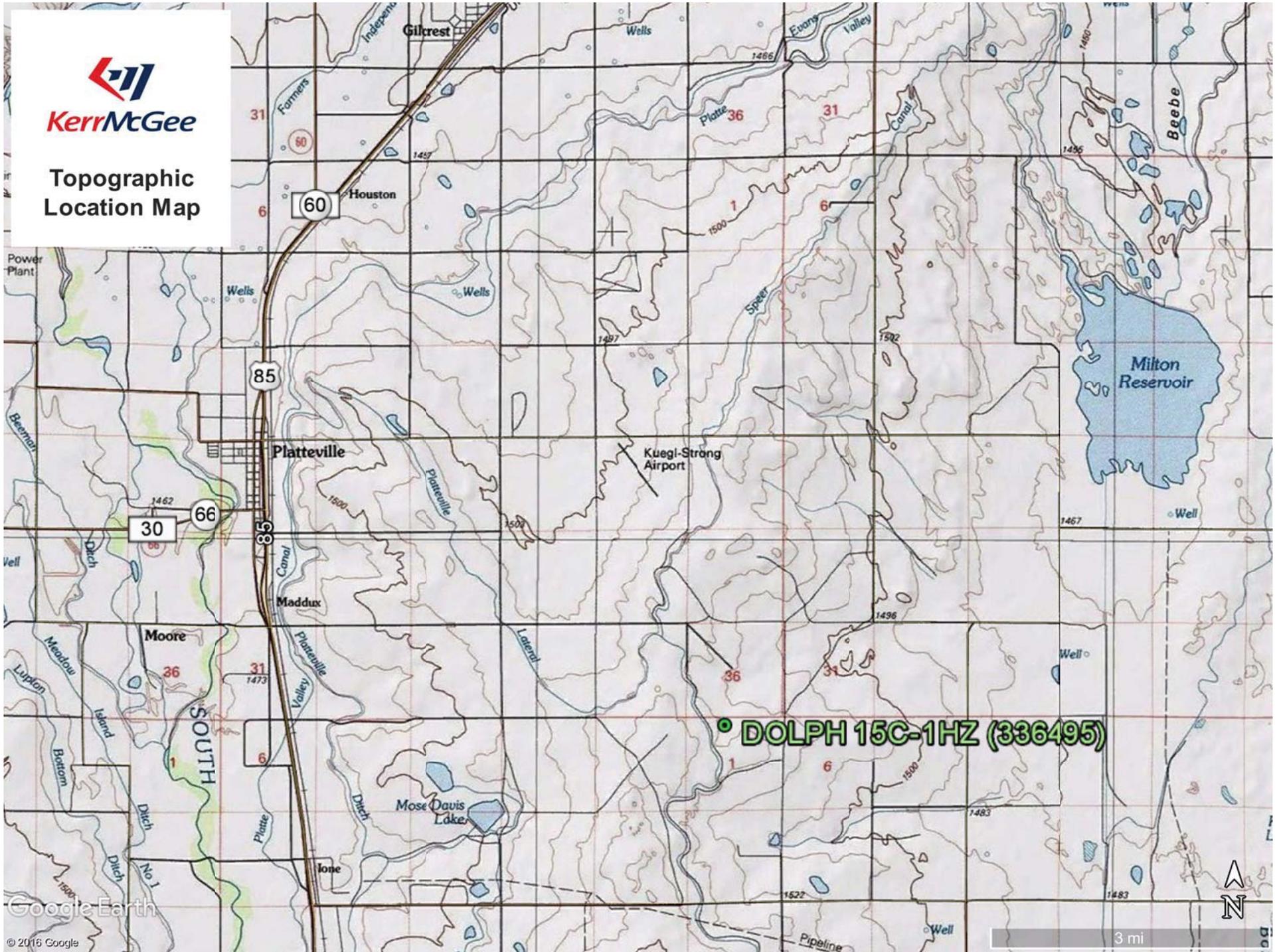


**Reference Transect**  
**Reclaim Transect**  
**Vegetation Photo Point**  
**Cardinal Direction Photo Location**

Legal Description: NENW Sect 1,  
 T2N-R66W  
 County: Weld  
 Land Use: Rangeland  
 Reference Area Cover: 17.78%  
 Reclamation Cover: 18.49%  
 Cover Ratio  
 (Reclaim/Reference): 96.16%  
 Inspector: J. Schoedel  
 Assessment Date: 07/06/2016



# Topographic Location Map



**DOLPH 15C-1HZ (336495)**

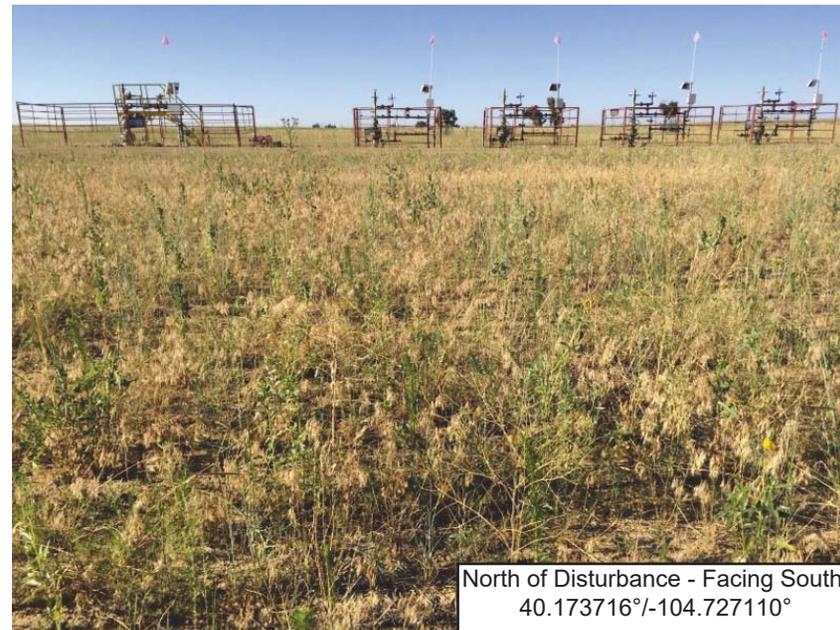




Edge of Disturbance - Facing West  
40.172504°/-104.726605°



South of Disturbance - Facing North  
40.173151°/-104.727122°



North of Disturbance - Facing South  
40.173716°/-104.727110°



West of Disturbance - Facing East  
40.173325°/-104.727773°



East of Disturbance - Facing West  
40.173339°/-104.726702°







Reference Area Vegetation Photo Point  
40.172153°/-104.726673°



**VEGETATION MONITORING FORM: Kerr-McGee Oil & Gas Onshore LP**

COGCC Location Name (ID): DOLPH 15C-1HZ (336495)		CO #: COP0095	Date of Assessment: 07/06/2016
Transect ID: Reclaim Transect 1	Length of Transect (ft.): 400	Transect Type: <input checked="" type="checkbox"/> Reclamation <input type="checkbox"/> Reference	
Inspector(s) (Name and Title): Jennie Schoedel - Environmental Scientist			
Weather at Time of Inspection: Clear, 90s		Method: Step Point	

Point	Foliar		Basal		Non-Vegetative
	Type	Species	Type	Species	
1	-		-		Bare Ground
2	-		-		Litter
3	Noxious Weed	Bromus tectorum	-		Bare Ground
4	Grass	Pascopyrum smithii (Agropyron)	-		Litter
5	-		-		Litter
6	-		-		Bare Ground
7	Grass	Pascopyrum smithii (Agropyron)	-		Litter
8	-		-		Bare Ground
9	Forb	Lactuca serriola	-		Litter
10	-		-		Litter
11	-		-		Bare Ground
12	Forb	Lactuca serriola	B-Forb	Lactuca serriola	-
13	-		-		Litter
14	-		-		Litter
15	-		-		Bare Ground
16	Noxious Weed	Bromus tectorum	-		Litter
17	-		-		Bare Ground
18	Grass	Pascopyrum smithii (Agropyron)	B-Grass	Pascopyrum smithii (Agropyron)	-
19	-		-		Litter
20	Noxious Weed	Bromus tectorum	-		Litter
21	-		-		Litter
22	-		-		Bare Ground
23	-		-		Litter
24	Grass	Pascopyrum smithii (Agropyron)	-		Litter
25	-		-		Litter
26	-		-		Bare Ground
27	Grass	Pascopyrum smithii (Agropyron)	-		Bare Ground
28	-		-		Bare Ground
29	-		-		Bare Ground

Point	Foliar		Basal		Non-Vegetative
	Type	Species	Type	Species	
30	Grass	Pascopyrum smithii (Agropyron)	-		Litter
31	Noxious Weed	Bromus tectorum	-		Litter
32	Noxious Weed	Bromus tectorum	-		Litter
33	-		-		Litter
34	-		-		Bare Ground
35	-		-		Litter
36	-		-		Bare Ground
37	-		-		Litter
38	-		-		Litter
39	-		-		Bare Ground
40	Noxious Weed	Bromus tectorum	-		Litter
41	-		-		Litter
42	-		-		Bare Ground
43	Noxious Weed	Bromus tectorum	-		Litter
44	Grass	Pascopyrum smithii (Agropyron)	-		Litter
45	Grass	Bromus inermis	-		Litter
46	-		-		Litter
47	-		-		Litter
48	-		-		Bare Ground
49	-		-		Litter
50	-		-		Bare Ground

### Photo Requirements

Representative photo looking down the length of each transect; including reference area.	<input checked="" type="checkbox"/>	YES	<input type="checkbox"/>	NO
Photo facing each cardinal direction (N, E, S, W) from edge of disturbance looking to well heads.	<input checked="" type="checkbox"/>	YES	<input type="checkbox"/>	NO
Representative photo down edge of disturbance.	<input checked="" type="checkbox"/>	YES	<input type="checkbox"/>	NO
Photo that documents the total cover of live perennial vegetation for the reference area.	<input checked="" type="checkbox"/>	YES	<input type="checkbox"/>	NO
Photo that documents the total cover of live perennial vegetation of the disturbed area.	<input checked="" type="checkbox"/>	YES	<input type="checkbox"/>	NO

### General Notes:

Landowner performing thistle removal at time of survey.  
List any newly identified species not present in drop-down lists.

### INSPECTION CERTIFICATION

I certify that this document and all attachments were prepared by me or under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. The information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of termination.

Inspector (Name)

Jennie Schoedel - Environmental Scientist



Date: 07/06/2016

**VEGETATION MONITORING FORM: Kerr-McGee Oil & Gas Onshore LP**

COGCC Location Name (ID): DOLPH 15C-1HZ (336495)		CO #: COP0095	Date of Assessment: 07/06/2016
Transect ID: Reclaim Transect 2	Length of Transect (ft.): 400	Transect Type: <input checked="" type="checkbox"/> Reclamation <input type="checkbox"/> Reference	
Inspector(s) (Name and Title): Jennie Schoedel - Environmental Scientist			
Weather at Time of Inspection: Clear, 90s		Method: Step Point	

Point	Foliar		Basal		Non-Vegetative
	Type	Species	Type	Species	
1	-		-		Litter
2	Noxious Weed	Bromus tectorum	-		Litter
3	-		-		Bare Ground
4	-		-		Litter
5	-		-		Bare Ground
6	Grass	Pascopyrum smithii (Agropyron)	-		Litter
7	-		-		Bare Ground
8	Grass	Pascopyrum smithii (Agropyron)	-		Bare Ground
9	-		-		Litter
10	-		-		Bare Ground
11	-		-		Litter
12	-		-		Bare Ground
13	Forb	Other spp. 1	B-Forb	Other spp. 1	-
14	-		-		Litter
15	-		-		Bare Ground
16	-		-		Bare Ground
17	-		-		Bare Ground
18	Noxious Weed	Bromus tectorum	-		Litter
19	Grass	Pascopyrum smithii (Agropyron)	-		Litter
20	Forb	Other spp. 2	-		Litter
21	-		-		Litter
22	Grass	Pascopyrum smithii (Agropyron)	-		Litter
23	-		-		Litter
24	Grass	Pascopyrum smithii (Agropyron)	-		Litter
25	Grass	Pascopyrum smithii (Agropyron)	-		Litter
26	-		-		Bare Ground
27	-		-		Litter
28	-		-		Litter
29	-		-		Bare Ground

Point	Foliar		Basal		Non-Vegetative
	Type	Species	Type	Species	
30	-		-		Bare Ground
31	-		-		Litter
32	Grass	Bromus inermis	-		Litter
33	-		-		Litter
34	-		-		Bare Ground
35	-		-		Bare Ground
36	Forb	Other spp. 1	-		Bare Ground
37	Noxious Weed	Bromus tectorum	-		Bare Ground
38	-		-		Bare Ground
39	Forb	Lactuca serriola	-		Litter
40	-		-		Litter
41	-		-		Litter
42	Noxious Weed	Bromus tectorum	-		Litter
43	-		-		Litter
44	Grass	Pascopyrum smithii (Agropyron)	-		Litter
45	-		-		Bare Ground
46	-		-		Bare Ground
47	Forb	Other spp. 2	-		Litter
48	-		-		Bare Ground
49	-		-		Bare Ground
50	Grass	Pascopyrum smithii (Agropyron)	-		Litter

### Photo Requirements

Representative photo looking down the length of each transect; including reference area.	<input checked="" type="checkbox"/>	YES	<input type="checkbox"/>	NO
Photo facing each cardinal direction (N, E, S, W) from edge of disturbance looking to well heads.	<input checked="" type="checkbox"/>	YES	<input type="checkbox"/>	NO
Representative photo down edge of disturbance.	<input checked="" type="checkbox"/>	YES	<input type="checkbox"/>	NO
Photo that documents the total cover of live perennial vegetation for the reference area.	<input checked="" type="checkbox"/>	YES	<input type="checkbox"/>	NO
Photo that documents the total cover of live perennial vegetation of the disturbed area.	<input checked="" type="checkbox"/>	YES	<input type="checkbox"/>	NO

### General Notes: Forb other species 1 Russian thistle

List any newly identified species not present in drop-down lists.  
 Forb other species 2 mareetail  
 Landowner performing thistle removal at time of survey.

### INSPECTION CERTIFICATION

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Inspector (Name)

Jennie Schoedel - Environmental Scientist



Date: 07/06/2016

**VEGETATION MONITORING FORM: Kerr-McGee Oil & Gas Onshore LP**

COGCC Location Name (ID): DOLPH 15C-1HZ (336495)

CO #: COP0095

Date of Assessment: 07/06/2016

Transect ID: Reference Transect 1

Length of Transect (ft.): 400

Transect Type:

 Reclamation

 Reference

Inspector(s) (Name and Title): Jennie Schoedel - Environmental Scientist

Weather at Time of Inspection: Clear, 90s

Method: Step Point

Point	Foliar		Basal		Non-Vegetative
	Type	Species	Type	Species	
1	-		-		Litter
2	Noxious Weed	Bromus tectorum	-		Litter
3	Noxious Weed	Bromus tectorum	-		Litter
4	Grass	Hesperostipa comata	-		Litter
5	Grass	Hesperostipa comata	-		Litter
6	-		-		Litter
7	Noxious Weed	Bromus tectorum	-		Litter
8	-		-		Litter
9	Grass	Hesperostipa comata	-		Litter
10	-		-		Litter
11	Forb	Other spp. 1	-		Litter
12	Noxious Weed	Bromus tectorum	B-Noxious Weed	Bromus tectorum	-
13	-		-		Litter
14	Grass	Hesperostipa comata	-		Litter
15	Forb	Other spp. 1	-		Litter
16	-		-		Litter
17	-		-		Litter
18	-		-		Litter
19	Forb	Other spp. 2	-		Litter
20	Noxious Weed	Bromus tectorum	-		Litter
21	Grass	Hesperostipa comata	-		Litter
22	-		-		Bare Ground
23	-		-		Bare Ground
24	Forb	Lactuca serriola	-		Litter
25	-		-		Bare Ground
26	-		-		Litter
27	Forb	Other spp. 1	-		Litter
28	-		-		Litter
29	-		-		Litter

Point	Foliar		Basal		Non-Vegetative
	Type	Species	Type	Species	
30	-		-		Litter
31	Noxious Weed	Bromus tectorum	B-Forb	Other spp. 1	-
32	Forb	Lactuca serriola	-		Litter
33	Forb	Other spp. 1	-		Litter
34	-		-		Litter
35	-		-		Litter
36	Grass	Hesperostipa comata	-		Litter
37	-		-		Litter
38	-		-		Litter
39	Forb	Lactuca serriola	-		Litter
40	-		-		Bare Ground
41	-		-		Litter
42	Noxious Weed	Bromus tectorum	-		Litter
43	-		-		Litter
44	Noxious Weed	Bromus tectorum	-		Bare Ground
45	-		-		Litter
46	-		-		Litter
47	-		-		Litter
48	Forb	Other spp. 1	-		Litter
49	-		-		Litter
50	-		-		Litter

### Photo Requirements

Representative photo looking down the length of each transect; including reference area.	<input checked="" type="checkbox"/>	YES	<input type="checkbox"/>	NO
Photo facing each cardinal direction (N, E, S, W) from edge of disturbance looking to well heads.	<input checked="" type="checkbox"/>	YES	<input type="checkbox"/>	NO
Representative photo down edge of disturbance.	<input checked="" type="checkbox"/>	YES	<input type="checkbox"/>	NO
Photo that documents the total cover of live perennial vegetation for the reference area.	<input checked="" type="checkbox"/>	YES	<input type="checkbox"/>	NO
Photo that documents the total cover of live perennial vegetation of the disturbed area.	<input checked="" type="checkbox"/>	YES	<input type="checkbox"/>	NO

### General Notes: Forb other species 1 Russian thistle

List any newly identified species not present in drop-down lists. Forb other species 2 ragweed

### INSPECTION CERTIFICATION

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Inspector (Name)

Jennie Schoedel -Environmental Scientist



Date: 07/06/2016

**VEGETATION MONITORING FORM: Kerr-McGee Oil & Gas Onshore LP**

COGCC Location Name (ID): DOLPH 15C-1HZ (336495)		CO #: COP0095	Date of Assessment: 07/06/2016
Transect ID: Reference Transect 2	Length of Transect (ft.): 500	Transect Type: <input type="checkbox"/> Reclamation <input checked="" type="checkbox"/> Reference	
Inspector(s) (Name and Title): Jennie Schoedel - Environmental Scientist			
Weather at Time of Inspection: Clear, 90s		Method: Step Point	

Point	Foliar		Basal		Non-Vegetative
	Type	Species	Type	Species	
1	Noxious Weed	Bromus tectorum	-		Litter
2	Noxious Weed	Bromus tectorum	-		Litter
3	Forb	Other spp. 1	-		Litter
4	Noxious Weed	Bromus tectorum	-		Litter
5	-		-		Litter
6	Grass	Hesperostipa comata	-		Litter
7	Noxious Weed	Bromus tectorum	-		Litter
8	-		-		Litter
9	-		-		Litter
10	Grass	Pascopyrum smithii (Agropyron)	-		Litter
11	Grass	Hesperostipa comata	-		Litter
12	Noxious Weed	Bromus tectorum	-		Litter
13	-		-		Bare Ground
14	Noxious Weed	Bromus tectorum	-		Litter
15	-		-		Litter
16	Grass	Hesperostipa comata	-		Litter
17	-		-		Bare Ground
18	-		-		Litter
19	Grass	Hesperostipa comata	B-Grass	Hesperostipa comata	-
20	-		-		Litter
21	-		-		Bare Ground
22	Grass	Hesperostipa comata	-		Litter
23	-		-		Litter
24	Noxious Weed	Bromus tectorum	-		Litter
25	-		-		Litter
26	-		-		Litter
27	Grass	Hesperostipa comata	-		Litter
28	-		-		Litter
29	Noxious Weed	Bromus tectorum	-		Litter

Point	Foliar		Basal		Non-Vegetative
	Type	Species	Type	Species	
30	-		-		Litter
31	-		-		Litter
32	-		-		Bare Ground
33	-		-		Litter
34	Grass	Hesperostipa comata	B-Grass	Hesperostipa comata	-
35	-		-		Bare Ground
36	Grass	Hesperostipa comata	-		Litter
37	-		-		Litter
38	Forb	Other spp. 2	-		Litter
39	-		-		Litter
40	Grass	Hesperostipa comata	-		Litter
41	-		-		Bare Ground
42	-		-		Litter
43	Noxious Weed	Bromus tectorum	-		Bare Ground
44	-		-		Litter
45	-		-		Litter
46	-		-		Litter
47	Noxious Weed	Bromus tectorum	-		Litter
48	-		-		Litter
49	Noxious Weed	Bromus tectorum	-		Litter
50	-		-		Litter

**Photo Requirements**

Representative photo looking down the length of each transect; including reference area.	<input checked="" type="checkbox"/>	YES	<input type="checkbox"/>	NO
Photo facing each cardinal direction (N, E, S, W) from edge of disturbance looking to well heads.	<input checked="" type="checkbox"/>	YES	<input type="checkbox"/>	NO
Representative photo down edge of disturbance.	<input checked="" type="checkbox"/>	YES	<input type="checkbox"/>	NO
Photo that documents the total cover of live perennial vegetation for the reference area.	<input checked="" type="checkbox"/>	YES	<input type="checkbox"/>	NO
Photo that documents the total cover of live perennial vegetation of the disturbed area.	<input checked="" type="checkbox"/>	YES	<input type="checkbox"/>	NO

**General Notes:** Forb other species 1 Rush Skelton weed

List any newly identified species not present in drop-down lists. Forb other species 2 Russian thistle

**INSPECTION CERTIFICATION**

I certify that this document and all attachments were prepared by me or under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. The information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of termination.

Inspector (Name)

Jennie Schoedel -Environmental Scientist



Date: 07/06/2016