



**Industry Day
RBDMS
Where Are We and Where Are We Going**

Introduction

- **What is RBDMS**



- **Why RBDMS?**

- Experience
 - Used by over 25 state agencies
 - FracFocus
- Designed for oil and gas agencies
- Addressed major needs for WOGCC



Where Are We

- 1 Phase 1 Develop Preliminary eForm Web Application for Form 1, Spud Notices, Form 1C, and Form 1C Sampling Results
- 1 1.0. Develop Preliminary eForm Web Application for Form 1, Spud Notices, Form 1C, and Form 1C Sampling Results

Wyoming eForm


Login Name

Password

Operator # *Industry users only.*

Login

Service Version: 1.0.6.0 (@CSWEB)



RBDMS
Energy & Water Software | Data Solutions



Wyoming eForm



Wyoming eForm

New Application

Data Dictionaries

Reports

Operator	<input type="text"/>	Form Status	All ▼	Form Type	All ▼	Clear
Form ID	<input type="text"/>	Last Modify Start Date	<input type="text"/>	Last Modify End Date	<input type="text"/>	Find
API Number	<input type="text"/>	Submitted Start Date	<input type="text"/>	Submitted End Date	<input type="text"/>	



WY eForm



eForm version v0.1 WOGCCTestAgency

[Logout](#)

Wyoming eForm

New Application

Operator

Create Form

Form1_APD

Data Dictionaries

Reports



WY eForm

New APD - Form 1

Selected Operator TETON ENERGY 91

If you are drilling a new well, select **Create New APD**. Otherwise, select the appropriate option and locate the APD by entering the API, and selecting the sidetrack (if applicable).
Click **OK** to create the form. Click **Cancel** to return to the Dashboard.

If you are drilling a new Sidetrack for an existing well, select **New Sidetrack APD**. If you are re-entering or deepening an existing well, select either **Re-Enter** or **Deepen APD**.
If you are renewing or extending an existing APD, select **Renew / Extend Existing APD**.

- Create New APD** **Re-Enter APD** **Deepen APD**
 New Sidetrack APD **Renew / Extend Existing APD**

OK

Cancel



WY eForm



Operator: TETON ENERGY Form: Form1 Form ID: 148670 Status: DRAFT Last Saved: 09/10/2017 12:46:20 PM Submitted: -

FORM 1	LOCATION	OPERATOR INFO	FORM 1C	PARAMETERS	RESULT METHODS	ATTACHMENTS	PAYMENTS	REVIEW TASKS	COA	COMMENTS
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Application for Permit To API Number (WOGCC provided) Fill out the next two fields only if the sidetrack is not 00. Is the sidetrack a multi-lateral hole? Lateral Number

Multi Well Pad? If Yes, First or Subsequent Well? Anticipated Spud Date

Well Class Other Class Zone Type Deviation

Well Name Well Number (must end with H if Horizontal deviation) Unit Name - Unit Number (for committed lands only)

County Reservoir(s) WOGCC Field Name Split Estate Answer "Yes" if the Surface owner, on disturbed lands, differs at all from the Mineral owner. If Split Estate, provide Form 1A.

Mineral and Surface Ownership State Mineral Lease # Federal Mineral Lease #

Well Spacing

Does this well conform to Chapter 3 Sec. 2? Is this well an exception location? If yes, attach the application. Is this well in a spaced or exempted area? Spacing Docket # Hearing Application Check #

(Reservoir specific. The most recent is usually applicable.)

Setback Distance

Per Chapter 3 Section 47, is this surface location less than 1000 feet from an Occupied Structure? If YES, file a Mitigation Plan. Per Chapter 3 Section 22, is this surface location less than 350 feet from water?

Proposed Depth (MD) Proposed Depth (TVD) Ungraded Elevation Graded Elevation

Casing Feature	Size of Hole	Size of Casing	Lb / Foot	API Pipe Grade	New / Used	Centralizers	Depth (MD)	Sx of API Cement	Cement Class
<< < Page 1 of 0 >> >>									
No records to view									

Add

Remove

DESCRIPTION OF PROPOSED OPERATIONS

If proposal is to directionally drill or deepen, give pertinent data on subsurface locations, measured and true vertical depth. If proposal is to deepen, give data on present productive zone and proposed new productive zone. Give drilling fluids program.

(NOTE ANY PLANNED OPERATIONS PREVIOUSLY SUBMITTED.)

WY eForm Rollout

- **When**
 - ??? (end of Sep/early Oct)
 - Final testing of BWQ
 - Install on State's servers
 - Watch website for information on schedule
- **How**
 - **Training**
 - User manual
 - Onsite at WOGCC office
 - Webinars?
 - **Ongoing**
 - YouTube videos for refresher



RBDMS – Where Are We Going

Phase 2 Develop Preliminary WY RBDMS.NET and Data Mining, and Update eForm for UIC/MIT and Routine Inspections, Initial Spill / Incident Reports,

2 and UIC Sampling Results

2 1.0. Develop Preliminary WY RBDMS.NET Desktop Application with Read-only Entity-Bond Module

2 2.0. Develop Well-Construct Module and Configure GIS Module for Wells

2 3.0. Develop the eForm Web Pages for UIC/MIT and Routine Inspections, Initial Spill / Incident Reports, and UIC Sampling Results (including the ability to upload and process associated EDDs)

2 4.0. Develop Complaints, Incidents, and Inspections Modules, and Surface Data from eForm as Read-only

2 5.0. Develop Forms Module for Form 1C Data and Environmental (ENV) Module for Form 1C and UIC Sampling Results, and Surface eForm Data as Read-only

2 6.0. Develop Preliminary Data Mining Web Application

2 7.0. WOGCC Preliminary WY RBDMS.NET and Data Mining, and Updated eForm UAT

- **Phase 2 - projected for 275 days**
- **Internal**
 - RBDMS.NET
 - UIC/MIT
 - Inspections
 - Complaints
- **External**
 - Data Mining
 - Incident/spill reporting and UIC sample results



RBDMS – Where Are We Going

3 Phase 3 Complete WY RBDMS.NET, Update eForm for 6 Inspections , Update Data Mining

1.0. Update Entity-Bond and Well-Construct Modules, Develop Editable Form 1 (APD), Form 3 (Well Completion), Form 4 (Sundry), Form 6 (Agent/Operator Designation), and Form 7 (Well Transfer) Forms, and Related E-Form Requirements

2.0. Develop Facility Module, Develop Editable Form 7A (Pit Transfer), Form 14B (Application for Permit to Construct Pit), Form 15 (Application for Permit to Conduct Geophysical/Seismic Operations), Form 20 (Road Application), Application to Permit Gas or Other Extraction Plant, and Application to Permit Compost/Remediation Facility Forms, Related E-Form Requirements, and Update GIS Module

3.0. Develop the eForm Web Pages for Non-UIC Well and Facility Inspections (including the ability to upload and process associated EDDs), and Update Data Mining

4.0. Develop Read-only Well-Production-Disposition-Injection and Well-History Modules, and FracFocus Integration (if applicable)

5.0. Update Inspections Modules

6.0. Develop Financial and Hearing-Docket Modules

7.0. Develop 10 Custom Reports, including UIC Data Extract

8.0. WOGCC Updated WY RBDMS.NET, eForm, and Data Mining UAT

- **Phase 3 – Projected for 426 days**
- **Internal**
 - **Inspection – Non-UIC and Facilities**
 - **Financial (bonds)**
 - **UIC Data Extract**
 - **RBDMS.NET**
 - **Custom Data Reports**
- **External**
 - **Develop editable forms for Form 1, 3, 4, 6, 7**
 - **Develop editable permits for pits, seismic, road spreads, gas plants, compost facilities**
 - **Hearing-Docket applications**
 - **Data mining**

RBDMS – Where Are We Going

Phase 4 Complete eForm for Form 1, 3, 4, 6, 7, 7A, 14B, 15, 20, applications to permit Gas or Other Extraction Plant and Compost/Remediation Facility, Monthly Prod/Disp/Inj Reporting, Update WY RBDMS.NET, Complete Data Mining

1.0. Develop the eForm Web Pages for Updated-Form 1 (APD), Form 14B (Application for Permit to Construct Pit), Form 3 (Well Completion), Form 4 (Sundry), Form 6 (Agent/Operator Designation), Form 7 (Well Transfer), Form 7A (Pit Transfer), Form 14B (Application for Permit to Construct Pit), Form 15 (Application for Permit to Conduct Geophysical/Seismic Operations), Form 20 (Road Application), Application to Permit Gas or Other Extraction Plant, Application to Permit Compost/Remediation Facility, and Monthly Prod/Disp/Inj Reporting (including the ability to upload and process the monthly reporting EDD(s))

2.0. Update Data Mining to Surface URL Links

3.0. WY RBDMS.NET, eForm, and Data Mining Final Releases

- **Phase 4 - projected for 211 days**
- **Internal**
 - **RBDMS.NET Final Release**
 - **Retire all of historical WOGCC databases**
- **External**
 - **eForm web pages for all forms in Phase 3**
 - **Monthly Production/Injection Volumes**
 - **Data Mining Final Release**



RBDMS

- **RBDMS Rollout**
 - Watch website for information on schedule
- **Operator Use**
 - Attend training
 - Adopt eForm use
- **Benefits**
 - Reduction of time
 - Removes data entry duplication
 - Allows concurrent review
 - Applicants can track submittals through process
 - Reduction of resources
 - Submit without paper
 - Process without printing
 - Better data reporting
 - Capture all data
 - Integrated GIS and Data Mining





Risk Based Management System Panel

Facilitator Tom Kropatsch

Panelists Debra Bagner, Mary Trembath and Kate Helm

RBDMS

APDs - Top 13 Mistakes

1. Permits are based on SURFACE HOLE
 1. API number
 2. County

2. Leave API# field blank unless it is an extension, renew or deepen

3. NEW - Only Need Original and One (1) copy if fee (Office of State Lands no longer requires a copy)



RBDMS

Please note: The Fee for Form 1 is now \$500 for all well permits. For CBM wells in the PRB, wells drilled or permitted after 3/15/01 are spaced on 80 acres under Docket 128-01 and Chapter 3, Section 2 (d). Those permitted before 3/15/01 are not spaced. After 7/1/05, all APDS on split estate lands must have Form 1 A. Under Ownership (Surface or Mineral) use Fee, State, or Federal.

FORM 1 March, 2016		Wyoming Oil & Gas Conservation Commission				12. County:	13. API Number: (WOGCC Provided)
INFORMATION ON THIS PAGE WILL BE RELEASED TO THE	Office of State Oil and Gas Supervisor				Split Estate	If Split Estate, provide Form 1A.	
	P. O. Box 2640				Yes <input type="checkbox"/> No <input type="checkbox"/>	Answer "Yes" if the Surface owner, on disturbed lands, differs at all from the Mineral owner.	
	Casper Wyoming 82602						
APPLICATION FOR PERMIT TO: <small>Submit 1 copy on Fed., 2 copies on Fee & 3 copies on State Land</small>							
DRILL <input type="checkbox"/> RE-ENTER/DEEPEEN <input type="checkbox"/> RENEW OR EXTEND <input type="checkbox"/>							
1. Well	Injection <input type="checkbox"/>	Monitor <input type="checkbox"/>	Oil Well <input type="checkbox"/>		Single Zone <input type="checkbox"/>	Directional <input type="checkbox"/>	These in gray require a separate admin. or Comm. approval.
Gas Well	Strat. Test <input type="checkbox"/>	Multiple Zone <input type="checkbox"/>	Horizontal (Please describe) <input type="checkbox"/>		Surface Ownership: Fee <input type="checkbox"/> State <input type="checkbox"/> Fed <input type="checkbox"/>		
Disposal <input type="checkbox"/>	Other: _____	Natural Drift <input type="checkbox"/>			Well Spacing: Yes <input type="checkbox"/> No <input type="checkbox"/>		
				Does this well conform to Chapter 3, Sec. 27? <input type="checkbox"/>		Is this well an exception location? If yes, attach the Admin. Approval: _____	
2. Operator:						Admin. Approval: _____ <input type="checkbox"/> Is this well in a spaced or exempted area?	
3. Address:						17. Spacing Document: _____	
Contact Person:		3b. Phone Number:		Email:		7. Unit Name - Unit Number: (for committed lands only)	
4. Location, (quarter-quarter and footages):		11. Lot or Tract, Section, Township & Range:		8. Well Number and Name:		Reservoir(s):	
Surface (SHL):		L	S	T	R	10. WOGCC Field Name:	
Top Productive Bottom (BHL):			S	T	R	SETBACK DISTANCE: Per Chapter 3 Section 47, is this surface location less than 1000 feet from an	
Latitude (SHL, NAD 83):	Longitude (SHL, NAD 83):	Latitude (BHL, NAD 83):	Longitude (BHL, NAD 83):	No <input type="checkbox"/> Yes <input type="checkbox"/> If YES, file a Mitigation Plan.		SETBACK DISTANCE: Per Chapter 3 Section 47, is this surface location less than 350 feet from water?	
19. Proposed depth:		21. Ungraded Elevation:		21a. Graded Elevation:		No <input type="checkbox"/> Yes <input type="checkbox"/> If YES, consider moving it.	
HD	TD						
SIZE OF HOLE	SIZE OF CASING	Lb/ Foot	API PIPE GRADE	NEW / USED	CENTRALIZER	DEPTH (MD)	Sx of API CEMENT CLASS
23. DESCRIPTION OF PROPOSED OPERATIONS: If proposal is to directionally drill or deepen, give pertinent data on subsurface locations, measured and true vertical depth. If proposal is to deepen, give data on present productive zone and proposed new productive zone. Give drilling fluids program. (NOTE ANY PLANNED OPERATIONS PREVIOUSLY SUBMITTED.)							



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APDs - Top 13 Mistakes (continued)

4. Don't forget lease numbers for state & federal wells**
5. Make sure ALL attachments go with the APD submitted**
 1. Plat, 1A,1B,1C
 2. Exception & Horizontal
6. Put API numbers**
 1. Extensions/Renewals
 2. Deepen /Re-enters
7. Form 1A**
 1. It is either A or B, not both
 2. If B: 1,2,3, or 4 must be marked
 3. #4 means you have an individual well. Bond \$10,000 is required if no signed surface use agreement

** Will also be an issue with RBDMS



RBDMS

APDs - Top 13 Mistakes (continued)

8. Do not include check stubs or copies of checks (especially colored copies)
9. No duplicate well names or surface hole location
10. Sticky notes etiquette
11. If you want Confidential status, put it on Form 1 in BOLD in Line 23
12. Show new changes on Line 23 on APD
13. Do not staple
 1. original APD
 2. Horizontal/Exception location application
 3. Check



RBDMS

BASELINE WATER SAMPLING

- **Selecting Wells**
 - ✓ Choose (4) water wells closest in a radial pattern
 - ✓ If 4 or less, they all will be tested

- **Water Source - Chapter 1, Section 2 (kkk)**

"Water Source shall mean water wells or springs that are permitted or adjudicated through the Wyoming Engineer's Office for the beneficial use of water including domestic, stock, industrial, miscellaneous, municipal, irrigation, or another beneficial use of water recognized and permitted by that office. This definition also includes any monitoring well permitted by the State Engineer's Office or the Department of Environmental Quality. For the purpose of this definition, coal bed methane wells (CBM) are not considered a water source."

- **Water supplies - Chapter 3, Section 22 (b)**

"Wells, pits, wellheads, pumping units, tanks, and treaters shall be located no closer than three hundred fifty feet (350') from any water supply."

- Wells indicated on SEO website as incomplete are frequently complete or will be in two years



RBDMS

Time line

- Baseline must be taken within 12 months prior to spud
- 1st subsequent sample must be taken 12-24 months after completion
- 2nd subsequent sample must be taken 36-48 months after completion AND 24 months after 1st Subsequent

Mitigation Plans and Pits

- Mitigation Plans-Chapter 3, Section 47: 1,000' from location
- With E-Permit / RBDMS you will be able to control and clear your own wells for spud through submission of sample reports
- Pits-What is "Closed Loop / Closed System"





WOGCC Engineers Panel

Facilitator Mark Watson

Panelists Sabrina Hamner, Frank Ingham, Adam Smith

Well Spacing and Density Rules

Chap. 3 Sec. 2 WOGCC Rules, W.S. 30-5-109

- **Primary evaluation of WOGCC Engineers**
- **Drilling and Spacing Unit** – *Defined area of land which dictates those WI owners who will share in the wells authorized within*
 - Area specific, formation specific
- **Place to Check? WOGCC website → Area of Review**
- **Types:**
 - Vertical / Directional wells
 - Horizontal wells
- **Establishment (Both Area and Setbacks)**
 - Default Rule
 - Hearing → Seek to modify from Rule
 - Exempt → Federal Exploratory / Secondary & Tertiary Units, Tribal Lands
- **Spacing / Density Violations → Denied APD**



Examiner Hearings

- **Types of Examiner Hearings**

- Primarily:

- Creation of drilling and spacing units
- Increased density (changing # of wells)
- Forced Pooling Applications
- Amending Setbacks

- **Testimony**

- Land, geology, engineering → Professionally certified technical witnesses

- **Timing of approvals and dispositions**

- Dispositions formalized within 30 days → Supervisor recommends Examiner's recommendations to the Commissioners. Released to public upon receipt of draft orders from attorneys.



Operations - Technical Review

Chapter 3 of WOGCC Rules / Regs

- **Application Permit to Drill**
 - Vertical, directional, horizontal
 - Components subject to engineer review
- **Administrative Approvals (\$75 outside of APD)**
 - Horizontal Applications
 - Exception Applications
 - Commingling Requests
 - Injection Wells
- **Sundry Requests**
 - Well completions, stimulations, pluggings, etc.
- **Expediation Requests – Comments from the Engineers**

