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Compliance Inspection Report for the Colorado Oil and Gas Conservation Commission

Drilling Operations on Encana's PC22 Site

In Accordance with Rulison Sampling and Analysis Plan, Rev 3

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signature

June 27, 2013

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1. Executive Summary

Robert Morris, a Certified Health Physicist with M. H. Chew and Associate, Inc. participated in a document review and field inspection, along with Colorado Oil and Gas Conservation Commission (COGCC) staff members. The purpose was to assess compliance with requirements of the Rulison Sampling and Analysis Plan, Rev. 3 (RSAP) by personnel working at the Encana Oil and Gas, Inc. PC22 South Piceance well site on June 11, 2013.

The inspection found that Encana is in compliance with the requirements of the RSAP as they apply to that location and the wells drilled from that location.

No adverse findings or observations are made.

2. Introduction

Colorado Oil and Gas Conservation Commission (COGCC) has contracted with M. H. Chew & Associates, Inc. to support regulatory activities associated with Project Rulison and Project Rio Blanco. A field inspection was performed of operations at the Encana Oil and Gas, Inc. PC22 South Piceance site on June 11, 2013.

The inspection was conducted to determine compliance with the Rulison Sampling and Analysis Plan (RSAP), Revision 3.

Robert Morris of M. H. Chew & Associates, Inc. toured the site with Chris Canfield and Carlos Lujan, both with COGCC Northwest Region. We were accompanied Charles Jensen with Encana Oil and Gas, Inc. EHS Environmental Group.

3. Location

The Encana's PC22 site is located approximately 4 miles southeast of Parachute. It is in the Tier II zone in Sector 11 on the RSAP monitoring zone map, approximately 3 miles northwest from Project Rulison surface ground zero. Figure 1 is an overview map of the PC22 site location taken from document number 400381118 in the COGCC database. Figure 2 approximately locates PC22 on the monitoring zone map.

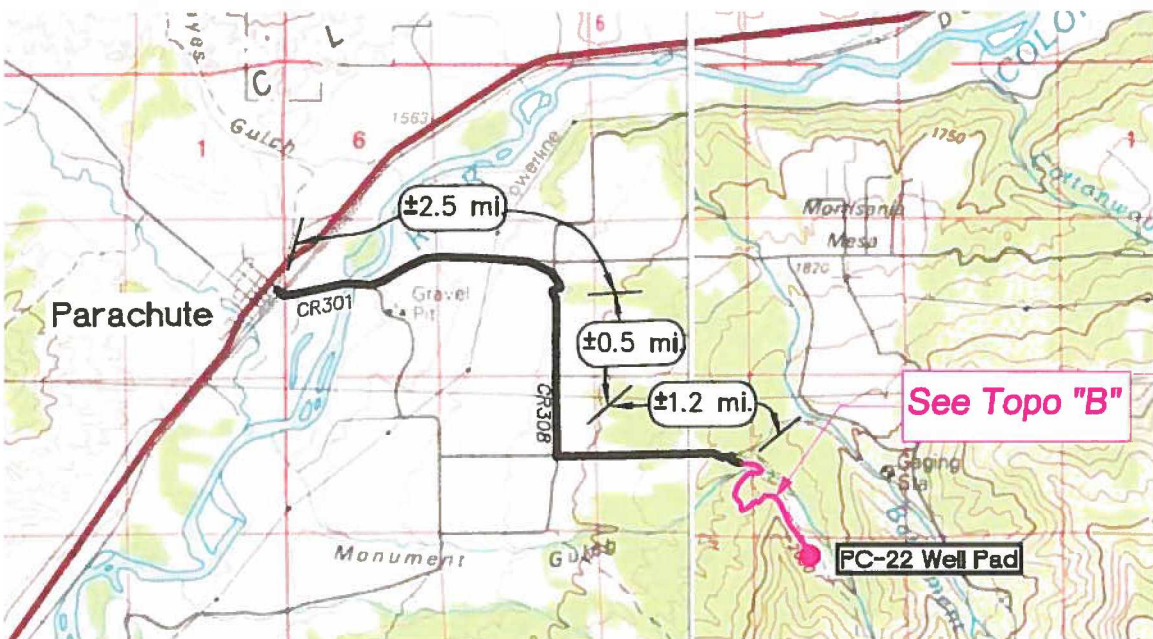


Figure 1. Overview map of PC22 site location.

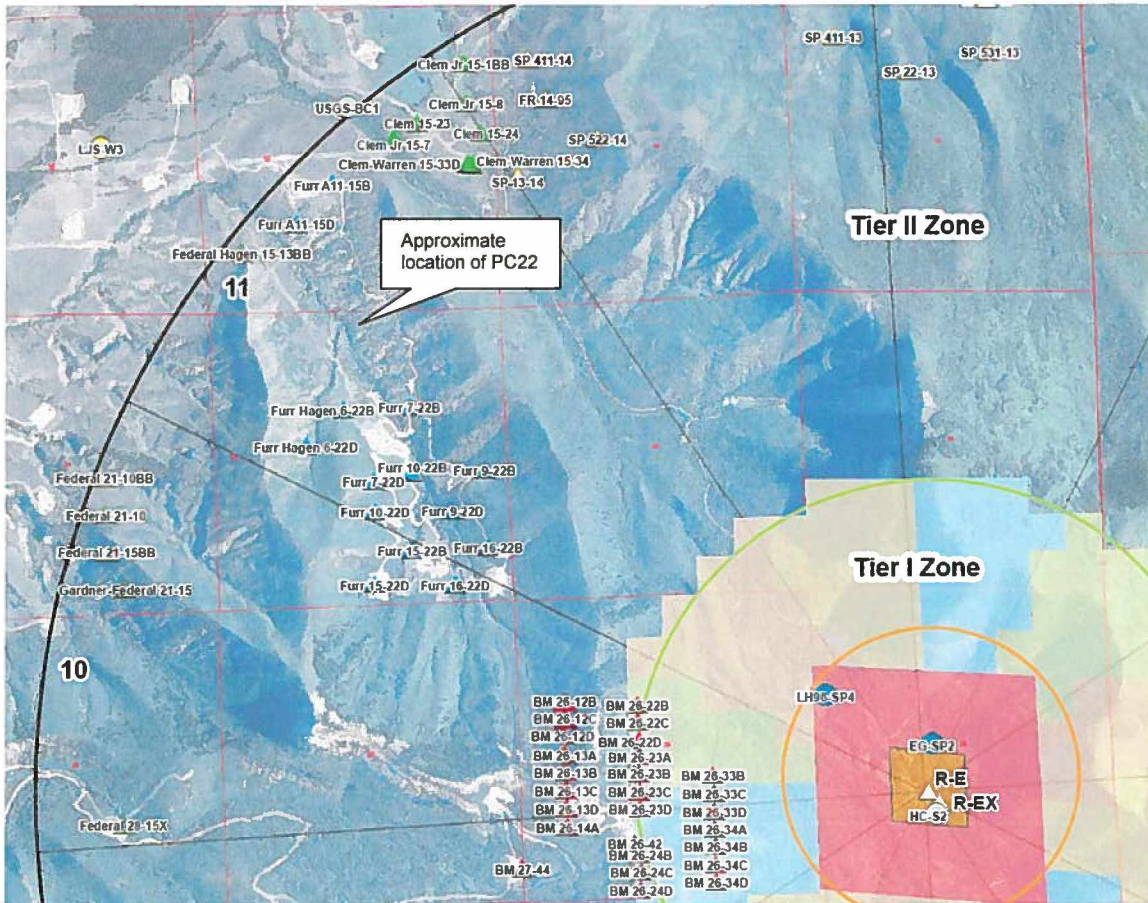


Figure 2. Approximate PC22 site location on the RSAP monitoring zone map.

A total of 21 wells have been, or will be, drilled from the PC22 well pad. The wells drilled from this site are not the closest wells in Sector 11 to Project Rulison surface ground zero. See Figure 3, taken from document number 400381118 in the COGCC database, for location reference with respect to Furr Hagen 15-22B well which is closer to surface ground zero.

Inspection: RSAP Compliance of Drilling Operations at Encana PC22 Site

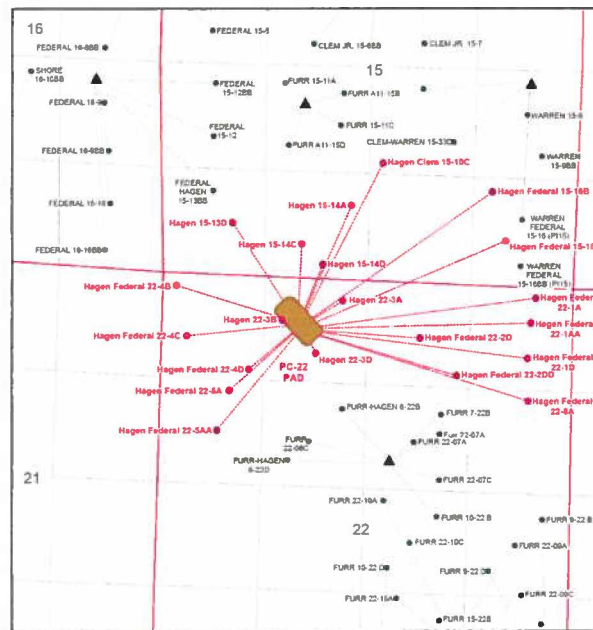


Figure 3. PC22 wells in relationship to existing Sector 11 wells.

Figure 4 is a photograph taken on June 11, 2013 of drilling operations at PC22.



Figure 4. View of drilling Rig 303 on PC22.

4. Observations


Prior to the site visit we met Charles Jensen at the Encana office in Parachute. It is clear that some local Encana staff members are aware of the company's obligations under the RSAP. It appears that most of the staff members with responsibility for detailed knowledge of the RSAP work out of the Denver office.

As part of this inspection, documents in the COGCC on-line database pertaining to PC22 site were reviewed. Correspondence from Encana regulatory analyst, Heather Mitchell, to COGCC staff (document number 1642120) pertaining to interpretation of the COAs demonstrate that the Encana staff is aware of the detailed requirements in the RSAP.

Encana personnel, and Patterson personnel, and possibly employees of other companies were involved in drilling operations.

The site was under careful control with access rosters, safety briefings, and visitor escort required for entry. Drilling operations were in progress during this inspection.

Most of the on-site personnel we encountered were unfamiliar with the RSAP. However the Encana on-site supervisory personnel were aware of the RSAP and provided information from the Encana Emergency Response Plan identifying Richard Henry as the Radiation Safety Officer. A copy of one page from the plan is shown as Figure 5.

	EMERGENCY RESPONSE PLAN U.S.A. DIVISION	Document No: ERP-0021 Revised By/Date: Reviewed By/Date: ERPComm/05.14.10 Approved By/Date: ERPComm/05.14.10
SITE SPECIFIC SAFETY AND EVACUATION PLAN		

FACILITY/ SITE INFORMATION	GPS Information
Patterson 303 Parachute Site Location Name: PC22 South Piceance Emergency Notification Number: 970-625-8095 Garfield Dispatch Site Phone Number: 303-353-5354 Legal Description: Qtr NE 1/4 Qtr NW 1/4 Sec 22 Twn 7S Rng 9W Mailing Address: _____	Latitude : 39.43024 N Longitude: 107.98360 W Elevation: 6530

Emergency Directions to the site, rig supervisors, and emergency evacuation plan:

Emergency Directions: ~ From Parachute to the PC22 location.
 Travel southerly on CR301 approx. 2.5 miles, Turn (South) onto CR 308 0.5 miles Turn left (East) onto CR 302 1.2 miles. Turn right onto road to the PC22 (Follow Right Signs 1.3 miles to the PC22 location).
(Encana Rig Supervisors: Charlie Brown and Michael Olsen.) Evacuation Plan:
 Notify Garfield Dispatch. In the event of any natural upset, such as wild fire, be prepared for emergency response. First identify the source and prepare to evacuate using vehicles if safe to do so. If primary vehicle travel route to PC22 is blocked, determine if staying on location is the safest response. If evacuation is imminent and vehicle travel too high a risk, travel by foot away from the danger to a secure pre-selected muster location. If possible, prior to evacuation, secure the well by installing TIW valves in the casing or drill pipe, closing and manually locking down the pipe rams, and closing the annular preventer. The final step before evacuation if safe to do so is to shut down all rig power.

EMERGENCY RESPONSE NUMBERS		
Contact	Location	Number
Police/ Sheriff	Garfield Dispatch	970-625-8095
Fire	Garfield Dispatch	970-625-8095
Ambulance	Garfield Dispatch	970-625-8095
Hospital	Rifle Grand River Medical Center	970-625-3210
Hospital	St. Mary's Hospital and Care Flight	970-244-2273
Is "911" accessible from this location?		Yes: <input type="checkbox"/> No: x <input checked="" type="checkbox"/> Call Garfield Dispatch

COMPANY CONTACTS				
Name	Position	Location	Telephone	Cellular/ Other
Matt Abell	SP Drilling Group Lead	Denver	720-468-2618	Cell
John Grubich	SP Drilling Superintendent	Parachute	970-379-6735	Cell
Les Fuglevand	SP Drilling Field Supervisor	Parachute	406-690-1624	Cell
Richard Henry	Tier 2 urs Rad Officer	Denver	303-740-3978	Cell
Gage Soehner	SP Drilling Engineer	Denver	720-951-0732	Cell
Safety On Call		Parachute	970-210-8755	Cell
Enviro On Call		Parachute	970-319-9173	Cell
Nearest Encana Field Office:		Parachute	970-285-2600	Land Line
Nearest Encana Control Room Number:		Parachute	970-285-2615	Gas Control Land Line
Union Telephone (24-Hour Emergency Call Center)			877-386-2200	
Crisis Manager, North America		Calgary	403-645-3333	

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Figure 5. Example page from the Encana PC22 Site Specific Safety and Evacuation Plan identifying the Radiation Safety Officer.

5. Summary and Conclusions

An inspection of documents associated with Encana's PC22 site and drilling operations conducted on that site found that Encana is in compliance with the requirements of the RSAP as they apply to that location and the wells drilled from that location.

Because PC22 is in the Tier II zone, and because wells drilled from PC22 are not the closest to Project Rulison surface ground zero, there is no requirement for real-time monitoring of radiological conditions during drilling operations. Therefore it is reasonable to expect that, for most workers, awareness of the controls and monitoring defined in the RSAP would be low. That is what was observed.

Documents and correspondence in the COGCC database provide evidence that the Encana regulatory staff is aware of the requirements of RSAP.

This inspection resulted in no adverse findings.