

2580 Creekview Road Moab, Utah 84532 435/719-2018 435/719-2019 Fax

November 7, 2006

Fluid Minerals Group Bureau of Land Management 82 East Dogwood Moab, Utah 84532

RE: Application for Permit to Drill - Petro-Canada Resources (USA), Inc. Cottonwood Fed 23-41- 1,503' FSL & 463' FEL, NE/4 SE/4, Section 23, T13S, R15E, SLB&M, Carbon County, Utah

Dear Fluid Minerals Group:

On behalf of Petro-Canada Resources (USA), Inc. (Petro-Canada), Buys & Associates, Inc. respectfully submits the enclosed original and three copies of the Application for Permit to Drill (APD) for the above referenced federal surface and mineral vertical well. A request for exception to spacing (R649-3-2) is hereby requested based on topography since the well is located less than 460' of the drilling unit boundary. Petro-Canada is the only owner and operator within 460' of the proposed well. Included with the APD is the following supplemental information:

Exhibit "A" - Survey plats, layouts and photos of the proposed well site;

Exhibit "B" - Proposed location maps with access & pipeline corridor;

Exhibit "C" - Production Site Layout;

Exhibit "D" - Drilling Plan;

Exhibit "E" - Surface Use Plan;

Exhibit "F" - Typical BOP and Choke Manifold diagram.

Please accept this letter as Petro-Canada's, written request for confidential treatment of all information contained in and pertaining to this application.

Thank you very much for your timely consideration of this application. Please feel free to contact myself or Alan Vrooman of Petro-Canada at 303-350-1171 if you have any questions or need additional information.

Sincerely,

Am

Don Hamilton Agent for Petro-Canada

cc: Alan Vrooman, Petro-Canada Carla Konopka, Petro-Canada Don Stephens, BLM - Price Field Office Diana Whiney, Division of Oil, Gas & Mining



NOV 0 9 2006

DIV. OF OIL, GAS & MINING





Form 3160-3 February 2005) DEPARTMENT OF THE 1 BUREAU OF LAND MAN	INTERIOR	Γ		OMB N Expires 5. Lease Serial No. UTU-077547	APPROVED o. 1004-0137 March 31, 2007
APPLICATION FOR PERMIT TO	DRILL O	REENTER		6. If Indian, Allotec N/A	or Tribe Name
la. Type of work: DRILL REENT	ER	- He Mar			cement, Name and No.
b. Type of Well: Oil Well 🖌 Gas Well Other	Si	ngle Zone 🚺 Multi	ple Zone	8. Lease Name and Cottonwood F	
Name of Operator Petro-Canada Resources (USA), Inc.				9. API Well No. 43	-007-3125
a. Address 1099-18th Street, Suite 400 Denver, Colorado 80202		), (inchude area code) 17-2100		10. Field and Pool, or undersignated	
Location of Well (Report location clearly and in accordance with an At surface 56896   1,503' FSL & 463' FEL, NE/4 SE/4,	y State requirem 43919	- J. 6 18	0700	11. Scc., T. R. M. or E	
At proposed prod. zone 1,503' FSL & 463' FEL, NE/4 SE/4,		-110. 1959	15	Section 23, T1	3S, R15E, SLB&M
<ul> <li>Distance in miles and direction from nearest town or post office* 13.35 miles northeast of Sunnyside, Utah</li> </ul>				12. County or Parish Carbon	13. State UT
Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 1,197'	16. No. of a	cres in lease	17. Spacin 40 act	g Unit dedicated to this	·
Distance from proposed location*	19. Propose			BIA Bond Na on file	
to nearest well, drilling, completed, applied for, on this lease, ft. 2,300'	11, <b>500'</b>		UT 12	215	
Elevations (Show whether DF, KDB, RT, GL, etc.) 8,015' GR	22. Approxi	mate date work will star 05/01/2007	l tt*	23. Estimated duratio 35 days drilling	n ng 40 days completion
	24. Attac				
e following, completed in accordance with the requirements of Onshor Well plat certified by a registered surveyor. A Drilling Plan. A Surface Use Plan (if the location is on National Forest System I SUPO must be filed with the appropriate Forest Service Office).		<ol> <li>Bond to cover the ltem 20 above).</li> <li>Operator certification</li> </ol>	he operation ation	as unless covered by an	existing bond on file (see may be required by the
Signature Don Hamilton		(Printed/Typed) Don Hamilton	- <u></u>		Date 11/07/2006
Agent for Petro Canada Resources (USA), Inc.					
proved by (Signifure)		(Printed/Typed) BRADLEY (	G HII	1	Date [[-09-06
	Office	VIRONMENTAL	MANAG	ER	
plication approval does not warrant or certify that the applicant holds duct operations thereon. nditions of approval, if any, are attached.	legal or equi	table title to those right	ts in the subj	ectlease which would e	ntitle the applicant to
le 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crites any false, fictitious or fraudulent statements or representations as to	ime for any pa o any matter w	rson knowingly and w ithin its jurisdiction.	villfully to m	ake to any department o	r agency of the United
(Instructions on page 2)					

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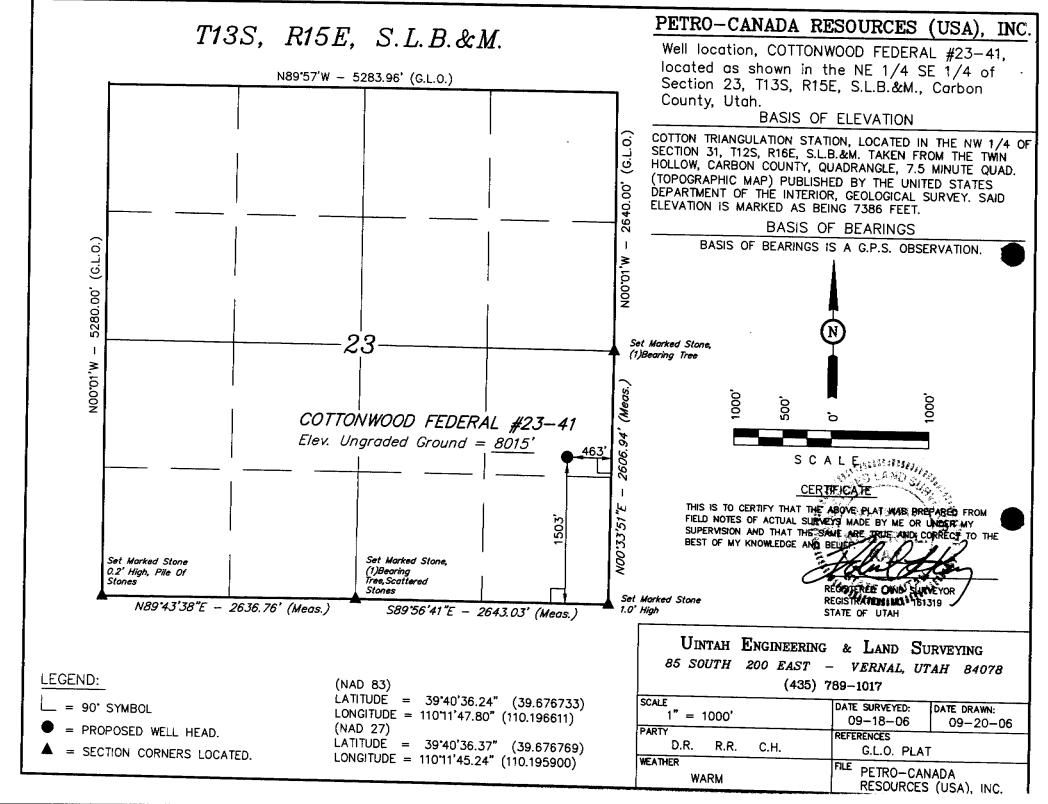
<u>.</u>

Federal Approval of this Action is Necessary

RECEIVED NOV 0 9 2006

DIV. OF OIL, GAS & MINING







### Attachment for Permit to Drill

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Name of Operator: Address:	Petro-Canada Resources (USA), Inc. 1099 – 18 <sup>th</sup> Street, Suite 400
Auuress.	Denver, CO 80202
Well Location:	Cottonwood Fed 23-41
	1,503' FSL & 463' FEL, NE/4 SE/4
	Section 23, T13S, R15E
	Carbon County, UT

### 1. <u>GEOLOGIC SURFACE FORMATION</u>

Green River

## 2 & 3.<u>ESTIMATED DEPTHS OF IMPORTANT GEOLOGIC MARKERS AND FORMATIONS EXPECTED TO CONTAIN</u> WATER, OIL AND GAS OR MINERALS

Formation	Depth	
Green River	Surface	
Wasatch	2,700"*	
Price River	6,200' *	
Castlegate	8,200' *	
Blackhawk	8,500' *	
Starpoint	8,800' *	
Mancos	9,200' *	
TD	11,500'	

### \* PROSPECTIVE PAY

## 4. PROPOSED CASING PROGRAM

All casing used to drill this well will be new casing.

Type	<u>Size</u>	<u>Weight</u>	Grade	<u>Conn.</u>	Top	Bottom	<u>Hole</u>
Surface	9.625"	43.5 ppf	L-80	STC	0'	1,200'	12-1/4"
Production	5.5"	20.0 ppf	P-110	LTC	0'	11,500'	7-7/8"

## DRILLING PLAN

#### 5. OPERATOR'S MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL

### Surface hole: No BOPE will be utilized.

<u>Production hole</u>: Prior to drilling out the surface casing shoe, 5,000 psi BOP equipment will be installed. The pipe rams will be operated at least once per day from surface casing depth to total depth. The blind rams will be tested once per day from surface casing depth to total depth if operations permit.

A diagram of the planned BOP equipment for normal drilling operations in this area is attached. As denoted there will be two valves and one check valve on the kill line, two valves on the choke line, and two adjustable chokes on the manifold system. The BOP "stack" will consist of two BOP rams (1 pipe, 1 blind) and one annular type preventer, all rated to a minimum of 5,000 psi working pressure.

The BOP equipment will be pressure tested prior to drilling below the surface casing shoe. All test pressures will be maintained for fifteen (15) minutes without any significant pressure decrease. Clear water will be circulated into the BOP stack and lines prior to pressure testing. The BLM and the state of Utah Division of Oil, Gas and Mining will be notified 24 hours in advance of all BOP pressure tests.

#### 6. MUD SYSTEMS

Sufficient mud materials to maintain mud properties, control lost circulation and to contain "kick" will be available at the well site.

<u>Interval</u>	Mud Weight (ppg)	<u>Viscosity</u>	Fluid Loss	<b>Remarks</b>
0-40'	8.3 - 8.6	27-40		Native Spud Mud
40' – 1,200'	8.3 - 8.6	27-40	15 cc or less	Native/Gel/Lime
1,200' – TD	8.6 – 9.5	38-46	15 cc or less	Potassium Formate

#### 7. <u>BLOOIE LINE</u>

- An automatic igniter will not be installed on blooie line. The blooie will have a constant ignition source.
- A "target tee" connection will be installed on blooie line for 90° change of directions for abrasion resistance.
- "Target tee" connections will be a minimum of 50' from wellhead.
- The blooie line discharge will be a minimum of 100' from the wellhead.

#### 8. AUXILIARY EQUIPMENT TO BE USED

- Upper Kelly cock; lower Kelly cock will be installed while drilling
- Inside BOP or stab-in valve (available on the rig floor)
- Safety valve(s) and subs to fit all string connections in use
- Mud monitoring will be visually observed

#### 9. TESTING. LOGGING, AND CORING PROGRAMS TO BE FOLLOWED

Cores	None anticipated.
Testing	None anticipated.
Sampling	30' samples; surface casing to TD
sampning	Preserve samples all show intervals
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Surveys	Run every 1,000' and on trips

Logging DIL-GR-SP, FDC-CNL-GR-Caliper-Pe-Microlog, Sonic-GR, all TD to base of surface casing, GR through surface casing.

#### 10. ANTICIPATED ABNORMAL PRESSURES OR TEMPERATURES EXPECTED

- No abnormal temperature or pressures are anticipated.
- The formations to be penetrated do not contain known H<sub>2</sub>S gas.

## DRILLING PLAN

### 11. WATER SUPPLY

- No water pipelines will be laid for this well.
- No water well will be drilled for this well.
- Drilling water for this will be hauled on the road(s) shown in Exhibit B
- Water to be used for drilling will be obtained through a direct purchase from Bill Barrett Corporation (BBC) utilizing an existing water well located in Cottonwood Canyon on State Lands: Section 32-T12S-R16E; BBC has previously been granted authorization with SITLA Right of Entry #4534 and Water Right #90-1542.

#### 12. CEMENT SYSTEMS

•	Surface Casing:	145 sacks Premium Lite Plus with additives mixed;
		Weight: 11.5 ppg
		Yield: 2.84 cu.ft/sack
		218 sacks Type III Cement with additives mixed;
		Weight: 14.5 ppg
		Yield: 1.41 cu.ft/sack
	Cement	will be circulated to surface with 100% excess

Production Casing: 1134 sacks Premium Lite High Strength cement with additives mixed;

Weight: 13.5 ppg

Yield: 1.49 cu.ft/sack

Cement will be placed in two stages through the use of a stage tool. Depth determined based on potential pay sections, estimated at 4000 ft.

353 sacks Class G cement with additives mixed.

- Weight: 15.8 ppg
- Yield: 1.15 cu.ft/sack

Top of cement to be determined by log and sample evaluation; estimated TOC 2,200'. Volume is log caliper +10%

13. ANTICIPATED STARTING DATE AND DURATION OF THE OPERATIONS

Starting Date: Duration: May 1, 2007 35 days, drilling and 40 days completion



Attachment for Permit to Drill

Name of Operator: Address:

Well Location:

Petro-Canada Resources (USA), Inc. 1099 – 18<sup>th</sup> Street, Suite 400 Denver, CO 80202 Cottonwood Fed 23-41 1,503' FSL & 463' FEL, NE/4 SE/4 Section 23, T13S, R15E Carbon County, UT

The dirt contractor will be provided with an approved copy of the surface use plan of operations before initiating construction.

An off-lease federal right-of-way is being requested with this application and is necessary for an access and pipeline corridor to the existing federal lease UTU-077547. No other surface use is necessary.

The BLM onsite inspection for the referenced well was conducted on Monday, September 25, 2006 at approximately 2:03 pm. In attendance at the onsite inspections were the following individuals:

Don Stephens Jeff Brower David Waller Bill James Nathan Sill Danny Rasmussen Ryan Robinson Alan Vrooman Don Hamilton Geologist Hydrologist Wildlife Biologist Habitat Manager Habitat Biologist Surveyor Survey Hand Regulatory Manager Agent

Bureau of Land Management-Price Bureau of Land Management-Price Bureau of Land Management-Price Division of Wildlife Resources Division of Wildlife Resources Uintah Engineering & Land Surveying Uintah Engineering & Land Surveying Petro-Canada Resources (USA), Inc. Buys & Associates, Inc.

#### 1. <u>Existing Roads</u>:

- a. The proposed well site is located approximately 13.35 miles northeast of Sunnyside, Utah.
- b. The use of roads under State and County Road Department maintenance are necessary to access the Cottonwood Ridge area. However, an encroachment permit is not anticipated since no upgrades to the State or County Road system are proposed at this time.
- c. All existing roads will be maintained and kept in good repair during all phases of operation.
- e. Vehicle operators will obey posted speed restrictions and observe safe speeds commensurate with road and weather conditions.
- f. An off-lease federal right-of-way is necessary for the off-lease portions of the access road and pipeline corridor trending northeast from the north line of Section 23, T13S, R15E. An off-lease federal right-of-way grant is being requested with this application.

## 2. <u>Planned Access Roads</u>:

- a. From the existing Sagebrush Flat access road the existing native bladed-surface Cottonwood Ridge access road trending southwest will be upgraded for approximately 4.0 miles to the existing two-track road.
- b. From the existing Cottonwood Ridge access road an existing two-track road will be upgraded trending east for 0.5 miles. From that point a new access is proposed trending southeast approximately 300' to the proposed well site. The access consists of entirely two-track upgrade and new disturbance and crosses no significant drainages.
- c. A road design plan is not anticipated at this time.
- d. The proposed access road will consist of a 22' travel surface within a 30' disturbed area across entirely BLM managed lands.
- e. BLM approval to upgrade the existing access corridor and construct the new access corridor is requested with this application.
- f. A maximum grade of 10% will be maintained throughout the project.
- g. No turnouts are proposed.
- h. No low water crossings and one 18' culvert at the spur road intersection with the Cottonwood Ridge road is anticipated. Additional culverts and adequate drainage structures will be incorporated into the remaining existing road.
- i. No surfacing material will come from federal or Indian lands.
- j. No gates or cattle guards are anticipated at this time.
- k. Surface disturbance and vehicular travel will be limited to the approved location access road.
- 1. All access roads and surface disturbing activities will conform to the standards outlined in the Bureau of Land Management and Forest Service publication: <u>Surface Operating Standards</u> for Oil and Gas Exploration and Development, (1989).
- m. The operator will be responsible for all maintenance of the access road including drainage structures.
- 3. Location of Existing Wells:
  - a. No existing wells are located within a one mile radius of the proposed well.
- 4. Location of Production Facilities:
  - a. All permanent structures will be painted a flat, non-reflective Olive Black to match the standard environmental colors. All facilities will be painted within six months of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) may be excluded.
  - b. Site security guidelines identified in 43 CFR 3163.7-5 and Onshore Oil and Gas Order No. 3 will be adhered to.

- c. A gas meter run will be constructed and located on lease within 500 feet of the wellhead. Meter runs will be housed and/or fenced. All gas production and measurement shall comply with the provisions of 43 CFR 3162. 7-3, Onshore Oil and Gas Order No. 5, and American Gas Association (AGA) Report No. 3.
- d. A two-tank battery will be constructed on this lease, it will be surrounded by a dike of sufficient capacity to contain the storage capacity of the largest tank. All loading lines and valves will be placed inside the berm surrounding the tank battery. All liquid hydrocarbons production and measurement shall conform to the provisions of 43 CFR 3162.7-3 and Onshore Oil and Gas Order No. 4 and Onshore Oil and Gas Order No. 5 for natural gas production and measurement.
- e. Any necessary pits will be properly fenced to prevent any wildlife and livestock entry.
- f. All access roads will be maintained as necessary to prevent erosion and accommodate yearround traffic. The road will be maintained in a safe useable condition.
- g. The site will require periodic maintenance to ensure that drainages are kept open and free of debris, ice, and snow, and that surfaces are properly treated to reduce erosion, fugitive dust, and impacts to adjacent areas.
- h. A gas pipeline is associated with this application and is being applied for at this time. The proposed gas pipeline corridor will leave the northwest side of the well site and traverse 300' northwest to the proposed Cottonwood Federal 24-43 pipeline corridor.
- i. The new gas pipeline will be a 10" or less steel buried / surface pipeline within a 30' wide utility corridor. The use of the proposed well sites and existing access roads will facilitate the staging of the pipeline construction. A new pipeline length of approximately 300' is associated with this well.
- j. Petro-Canada intends on installing the pipeline on the surface by welding many joints into long lengths, dragging the long lengths into position and then completing a final welding pass to join the long lengths together. Petro-Canada intends on connecting the pipeline together utilizing conventional welding technology.
- k. The pipeline will be buried unless surface rock exists or conditions encountered during construction prohibit the burial of the pipeline.
- 5. Location and Type of Water Supply:
  - a. The location and type of water supply has been addressed as number 11 within the previous drilling plan information.
- 6. <u>Source of Construction Material</u>:
  - a. The use of materials will conform to 43 CFR 3610.2-3.
  - b. No construction materials will be removed from BLM lands.
  - c. If any gravel is used, it will be obtained from a state approved gravel pit.

### 7. <u>Methods of Handling Waste Disposal</u>:

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- a. All wastes associated with this application will be contained and disposed of utilizing approved facilities.
- b. Drill cuttings will be contained and buried on site.
- c. The reserve pit will be located outboard of the location and along the southwest side of the pad.
- d. The reserve pit will be constructed so as not to leak, break, or allow any discharge.
- e. The reserve pit will be lined with 12 mil minimum thickness plastic nylon reinforced liner material. The liner will overlay a felt liner pad only if rock is encountered during excavation. The pit liner will overlap the pit walls and be covered with dirt and/or rocks to hold it in place. No trash, scrap pipe, etc., that could puncture the liner will be disposed of in the pit. Pit walls will be sloped no greater than 2:1. A minimum 2-foot freeboard will be maintained in the pit at all times during the drilling and completion operation.
- f. The reserve pit has been located in cut material. Three sides of the reserve pit will be fenced before drilling starts. The fourth side will be fenced as soon as drilling is completed, and shall remain until the pit is dry. After the reserve pit has dried, all areas not needed for production will be rehabilitated.
- g. No chemicals subject to reporting under SARA Title III (hazardous materials) in an amount greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling, testing, or completion of the well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the drilling, testing, or completion of the well.
- h. Trash will be contained in a trash cage and hauled away to an approved disposal site as necessary but no later than at the completion of drilling operations. The contents of the trash container will be hauled off periodically to the approved Uintah County Landfill near Vernal, Utah.
- i. Produced fluids from the well other than water will be produced into a test tank until such time as construction of production facilities is completed. Any spills of oil, gas, salt water or other produced fluids will be cleaned up and removed.
- j. After initial clean-up, a 400 bbl tank will be installed to contain produced waste water. This water will be transported from the tank to an approved disposal well for disposal near Roosevelt, Utah.
- k. Any salts and/or chemicals, which are an integral part of the drilling system, will be disposed of in the same manner as the drilling fluid.
- 1. Sanitary facilities will be on site at all times during operations. Sewage will be placed in a portable chemical toilet and the toilet replaced periodically utilizing a licensed contractor to transport by truck the portable chemical toilet so that its contents can be delivered to the Vernal Wastewater Treatment Facility in accordance with state and county regulations.

### 8. <u>Ancillary Facilities</u>:

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- a. A complete drilling crew camp is being proposed with this application and will be located central to the project area. A central crew camp will be analyzed in detail within the associated Environmental Assessment.
- 9. <u>Well Site Layout:</u> (See Exhibit B)
  - a. The well will be properly identified in accordance with 43 CFR 3162.6.
  - b. Access to the well pad will be from the northwest.
  - c. The pad and road designs are consistent with BLM specification
  - d. A pre-construction meeting with responsible company representative, contractors and the BLM will be conducted at the project site prior to commencement of surface-disturbing activities. The pad and road will be construction-staked prior to this meeting.
  - e. The pad has been staked at its maximum size of 245' X 290'; however it will be constructed smaller if possible, depending upon rig availability. Should the layout change, this application will be amended and approved utilizing a sundry notice.
  - f. All surface disturbing activities, will be supervised by a qualified, responsible company representative who is aware of the terms and conditions of the APD and specifications in the approved plans.
  - g. All cut and fill slopes will be such that stability can be maintained for the life of the activity.
  - h. Diversion ditches will be constructed as shown around the well site to prevent surface waters form entering the well site area.
  - i. The site surface will be graded to drain away from the pit to avoid pit spillage during large storm events.
  - j. The stockpiled topsoil (first 6 inches or maximum available) will be stored in a windrow on the uphill side of the location to prevent any possible contamination. All topsoil will be stockpiled for reclamation in such a way as to prevent soil loss and contamination.
  - k. Pits will remain fenced until site cleanup.
  - I. The blooie line will be located at least 100 feet from the well head.
  - m. Water injection may be implemented if necessary to minimize the amount of fugitive dust.
- 10. Plans for Restoration of the Surface (Interim Reclamation and Final Reclamation):
  - a. Site reclamation for a producing well will be accomplished for portions of the site not required for the continued operation of the well.
  - b. Upon well completion, any hydrocarbons in the pit shall be removed in accordance with 43 CFR 3162.7-1. Once the reserve pit is dry, the plastic nylon reinforced liner shall be torn and perforated before backfilling of the reserve pit. The reserve pit and that portion of the location not needed for production facilities/operations will be re-contoured to the approximate natural contours.

- c. Following BLM published Best Management Practices the interim reclamation will be completed within 90 days of completion of the well to reestablish vegetation, reduce dust and erosion and compliment the visual resources of the area.
  - a. All equipment and debris will be removed from the area proposed for interim reclamation and the pit area will be backfilled and re-contoured.
  - b. The area outside of the rig anchors and other disturbed areas not needed for the operation of the well will be re-contoured to blend with the surrounding area and reseeded at 12 lbs /acre with the following native grass seeds:

1.	Crested Wheat Grass	(4 lbs / acre)
2.	Needle and Thread Grass	(4 lbs / acre)

- 3. Rice Grass (4 lbs / acre)
- c. Reclaimed areas receiving incidental disturbance during the life of the producing well will be re-contoured and reseeded as soon as practical.
- d. The Operator will control noxious weeds along access road use authorizations, pipeline route authorizations, well sites, or other applicable facilities by spraying or mechanical removal. A list of noxious weeds may be obtained from the BLM or the appropriate County Extension Office. On BLM administered land, it is required that a Pesticide Use Proposal be submitted and approved prior to the application of herbicides, pesticides or possibly hazardous chemicals.
- e. Prior to final abandonment of the site, all disturbed areas, including the access road, will be scarified and left with a rough surface. The site will then be seeded and/or planted as prescribed by the BLM. The BLM recommended seed mix will be detailed within their approval documents.

## 11. Surface and Mineral Ownership:

- a. Surface Ownership Federal under the management of the Bureau of Land Management Price Field Office, 125 South 600 West, Price, Utah 84501; 435-636-3608.
- b. Mineral Ownership Federal under the management of the Bureau of Land Management Price Field Office, 125 South 600 West, Price, Utah 84501; 435-636-3608.

#### 12. Other Information:

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- a. Montgomery Archaeological Consultants has conducted a Class III archeological survey. A copy of the pending report will be submitted under separate cover to the appropriate agencies by Montgomery Archaeological Consultants.
- b. A paleontological survey has not been required but a BLM approved paleontologist will be present and monitor construction activities during the excavation of bedrock.
- c. Our understanding of the results of the onsite inspection are:
  - a. No Threatened and Endangered flora and fauna species were found during the onsite inspection.
  - b. No drainage crossings that require additional State or Federal approval are being crossed.
- d. A screen of trees will be left between the proposed disturbance and the edge of the slope to minimize impacts to visual resources.

# 13. Operator's Representative and Certification

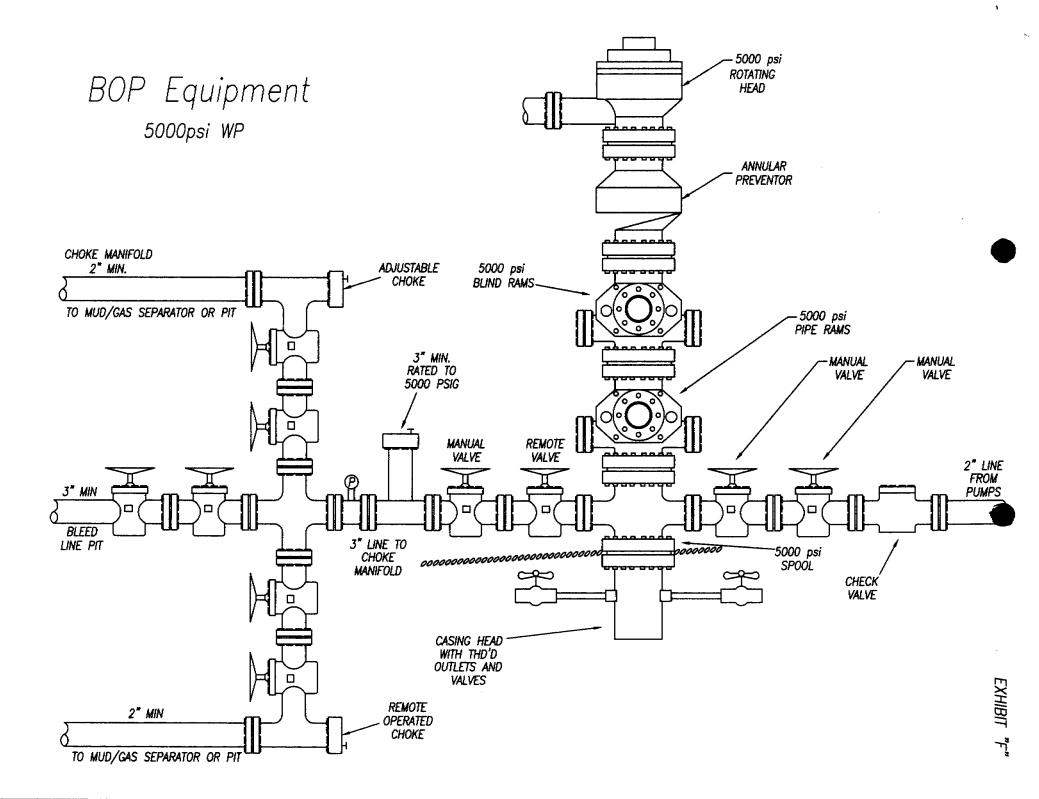
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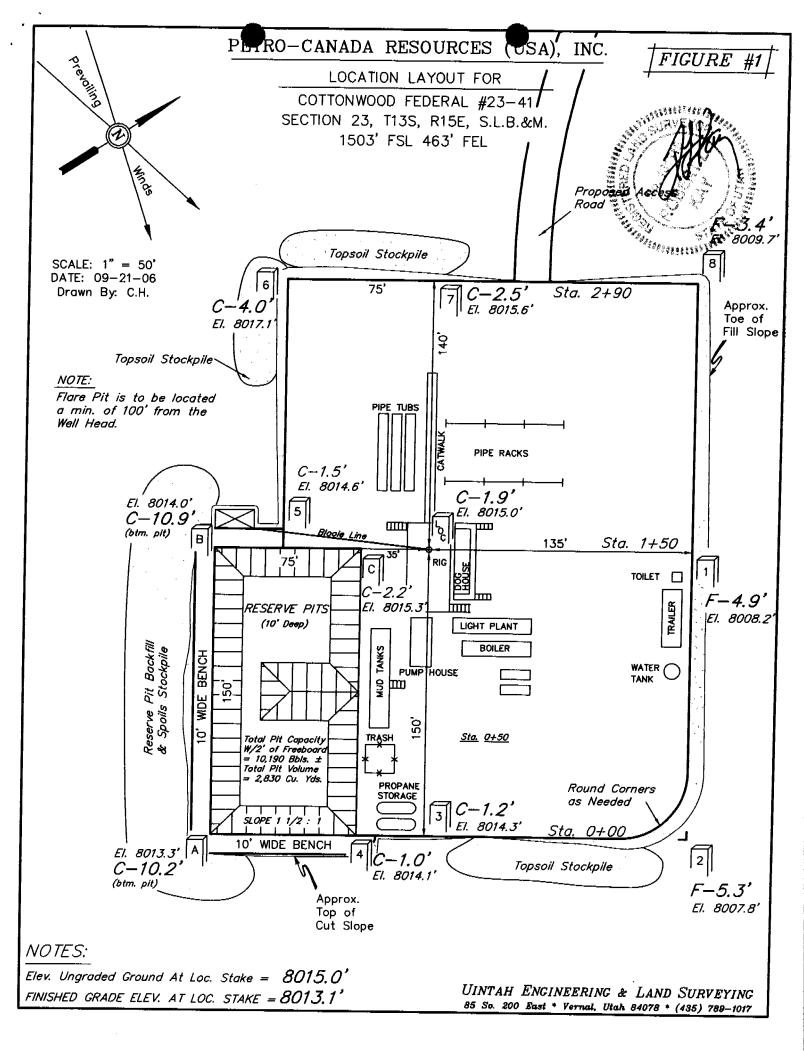
Title	Name	Office Phone
Company Representative (Denver)	Alan Vrooman	1-303-350-1171
Agent	Don Hamilton	1-435-719-2018

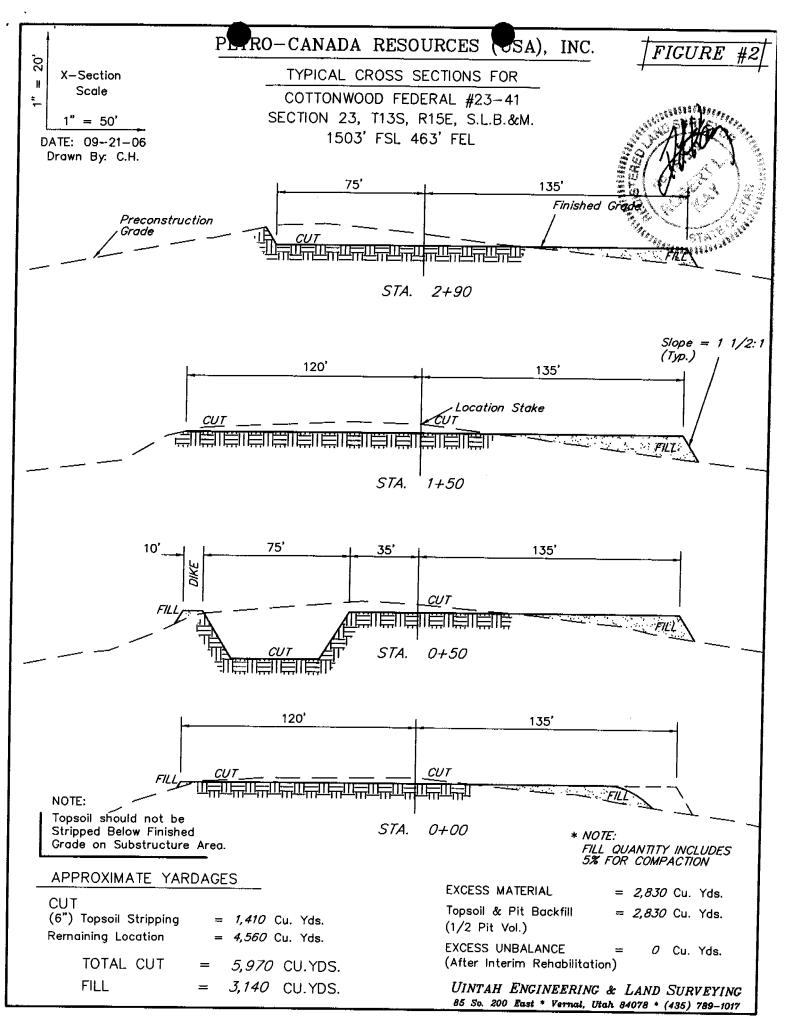
### Certification:

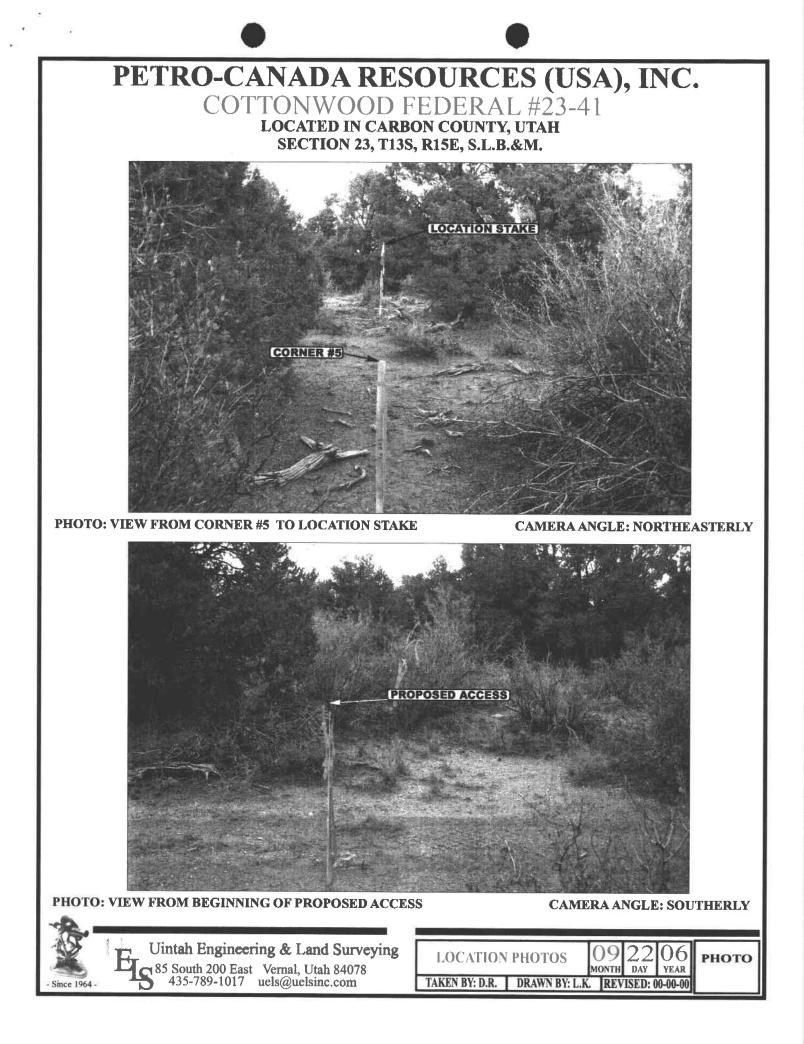
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exists; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Petro-Canada Resources (USA), Inc. and its contractors and subcontractors in conformity with this APD package and the terms and conditions under which it is approved. I also certify responsibility for the operations conducted on that portion of the leased lands associated with this application, with bond coverage being provided under Petro-Canada's BLM bond. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

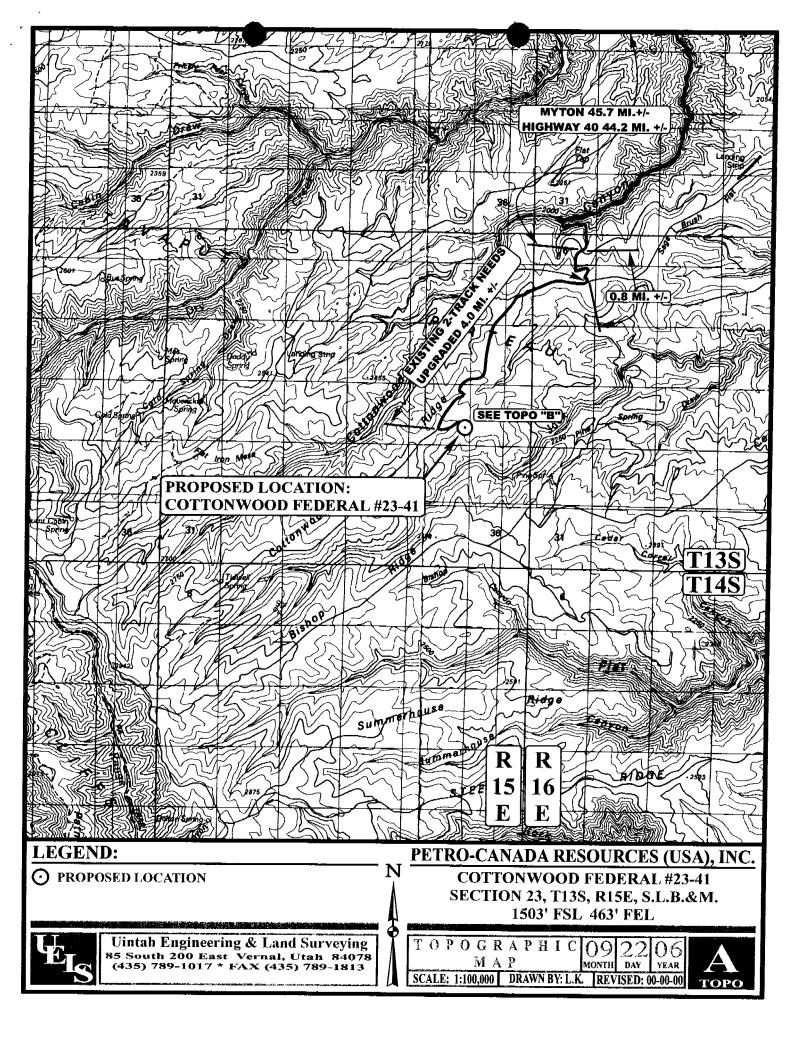
Signature: Don Hamilton Date: 11-7-06

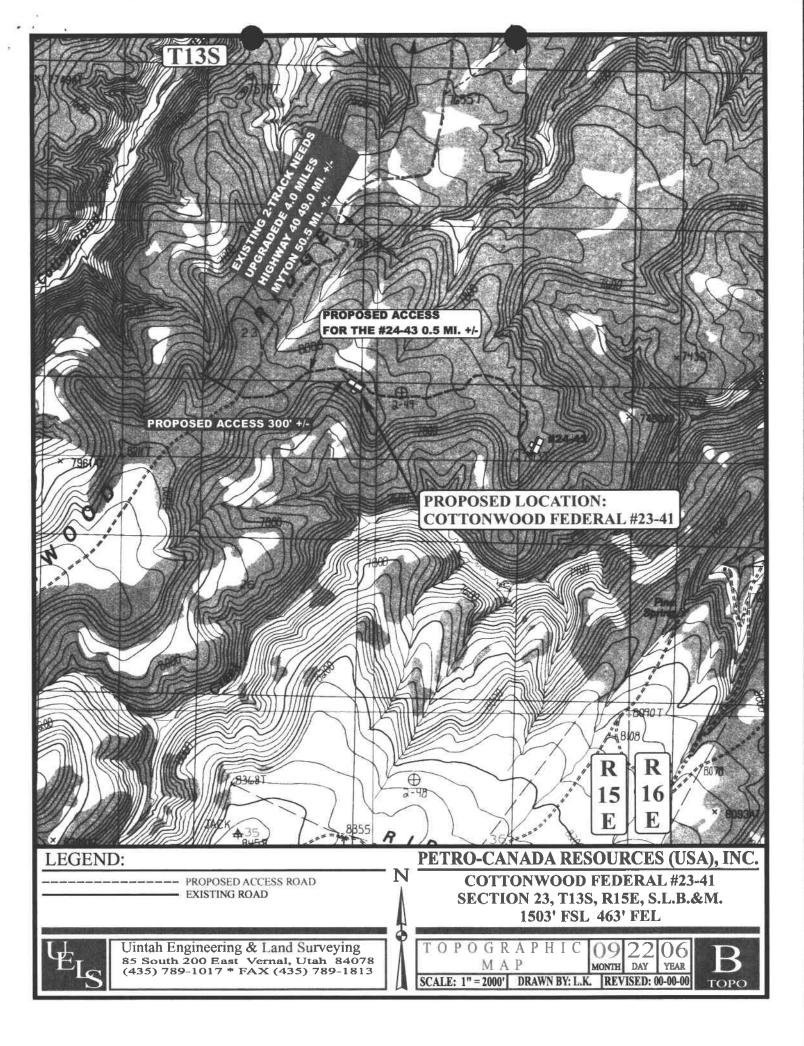


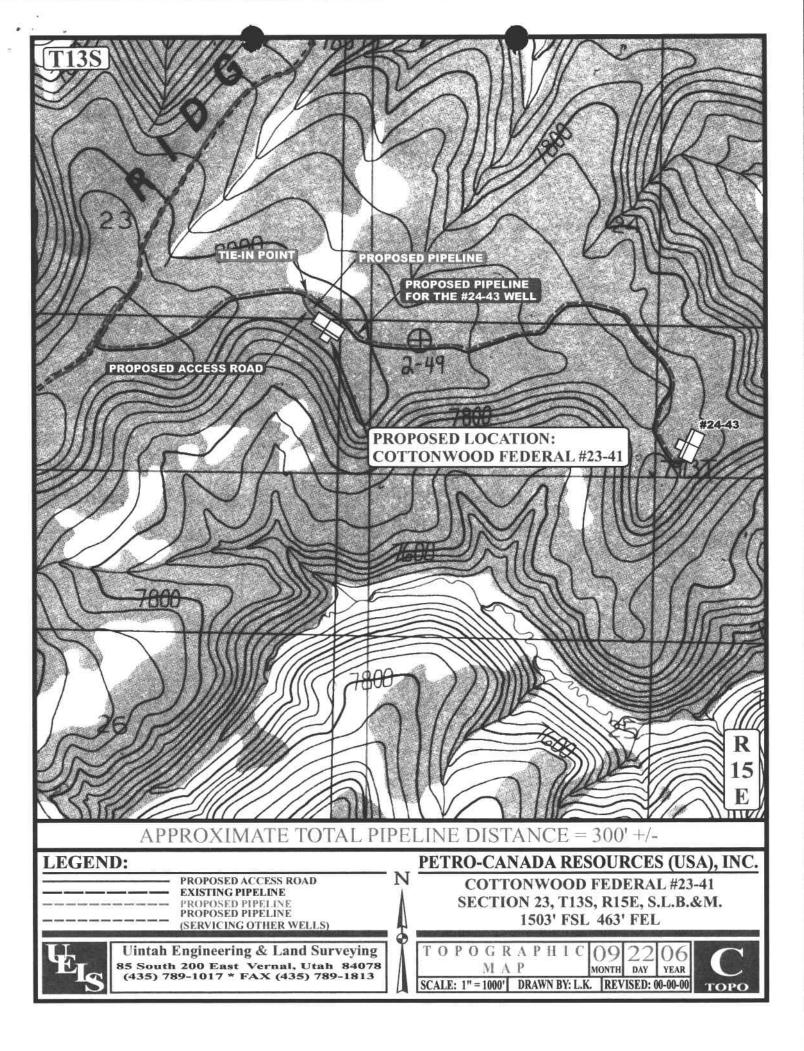






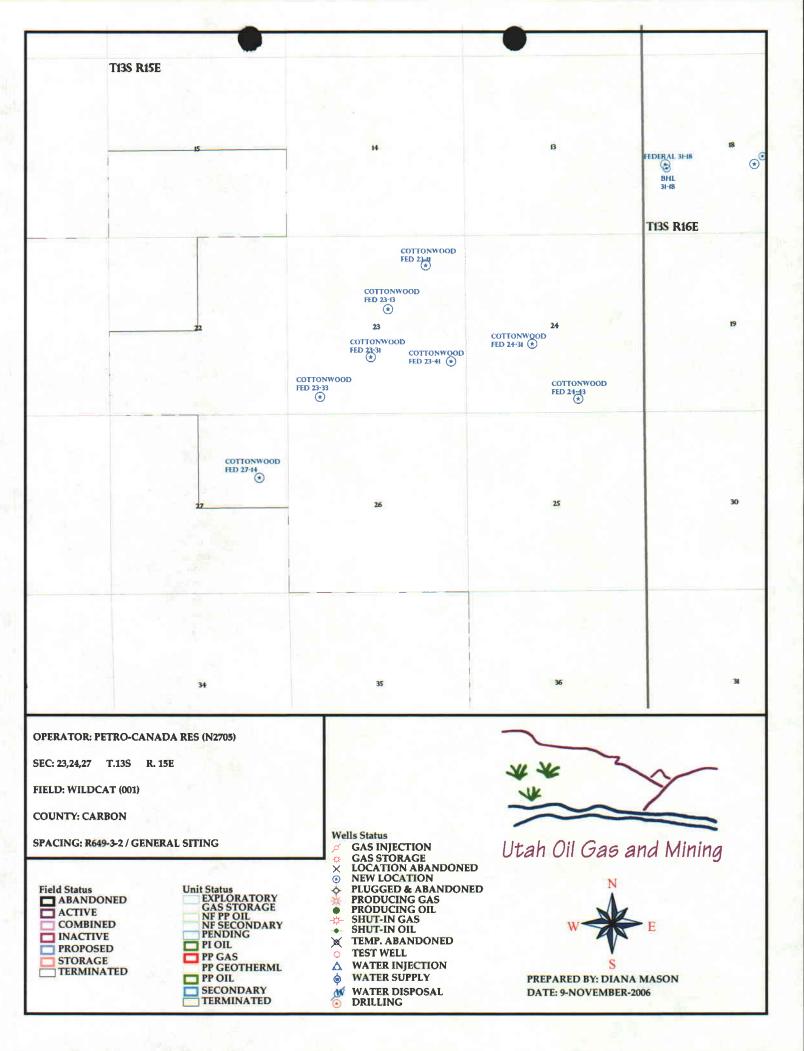






WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 11/09/2006	API NO. ASSIGNED: 43-007-31250
WELL NAME: COTTONWOOD FED 23-41 OPERATOR: PETRO-CANADA RESOURCES ( N2705 ) CONTACT: DON HAMILTON	PHONE NUMBER: 303-297-2100
PROPOSED LOCATION:	INSPECT LOCATN BY: / /
NESE 23 130S 150E SURFACE: 1503 FSL 0463 FEL	Tech Review Initials Date
BOTTOM: 1503 FSL 0463 FEL	Engineering
COUNTY: CARBON	Geology
LATITUDE: 39.67670 LONGITUDE: -110.1959 UTM SURF EASTINGS: 568961 NORTHINGS: 43919	75 Surface
FIELD NAME: WILDCAT (1	
LEASE TYPE: 1 - Federal	
LEASE NUMBER: UTU-077547	PROPOSED FORMATION: MNCS
SURFACE OWNER: 1 - Federal	COALBED METHANE WELL? NO
RECEIVED AND/OR REVIEWED: Plat Bond: Fed[1] Ind[] Sta[] Fee[] (No. UT 1215 ) N Potash (Y/N) N Oil Shale 190-5 (B) or 190-3 or 190-13 Water Permit (No. 90-1542 ) N RDCC Review (Y/N) (Date:) N# Fee Surf Agreement (Y/N) NUM Intent to Commingle (Y/N)	LOCATION AND SITING: R649-2-3. Unit: R649-3-2. General Siting: 460 From Qtr/Qtr & 920' Between Wells \$\vert\$ R649-3-3. Exception Drilling Unit Board Cause No: Eff Date: Siting: R649-3-11. Directional Drill
COMMENTS:	





# State of Utah

# Department of Natural Resources

MICHAEL R. STYLER Executive Director

## Division of Oil, Gas & Mining

JOHN R. BAZA Division Director JON M. HUNTSMAN, JR. Governor

GARY R. HERBERT Lieutenant Governor

November 9, 2006

Petro-Canada Resources (USA), Inc. 1099-18th St., Ste. 400 Denver, CO 80202

# Re: <u>Cottonwood Federal 23-41 Well, 1503' FSL, 463' FEL, NE SE, Sec. 23,</u> <u>T. 13 South, R. 15 East, Carbon County, Utah</u>

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann.§ 40-6-1 *et seq.*, Utah Administrative Code R649-3-1 *et seq.*, and the attached Conditions of Approval, approval to drill the referenced well is granted.

Appropriate information has been submitted to DOGM and administrative approval of the requested exception location is hereby granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-007-31250.

Sincerely,

Ty 7/7

Gil Hunt Associate Director

pab Enclosures

cc: Carbon County Assessor Bureau of Land Management, Moab District Office

Operator:	Petro-Canada Resources (USA), Inc.			
Well Name & Number	Cottony	vood Federal 23-41		
API Number:	43-007-	31250		
Lease:	UTU-0	77547		
Location: NE SE	Sec. 23	T. 13 South	<b>R.</b> 15 East	

# **Conditions of Approval**

1. General

Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

- 2. Notification Requirements
  - Notify the Division within 24 hours of spudding the well.
  - Contact Carol Daniels at (801) 538-5284.

Notify the Division prior to commencing operations to plug and abandon the well.

- Contact Dan Jarvis at (801) 538-5338
- 3. Reporting Requirements

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

- 4. State approval of this well does not supersede the required federal approval, which must be obtained prior to drilling.
- 5. This proposed well is located in an area for which drilling units (well spacing patterns) have not been established through an order of the Board of Oil, Gas and Mining (the "Board"). In order to avoid the possibility of waste or injury to correlative rights, the operator is requested, once the well has been drilled, completed, and has produced, to analyze geological and engineering data generated therefrom, as well as any similar data from surrounding areas if available. As soon as is practicable after completion of its analysis, and if the analysis suggests an area larger than the quarter-quarter section upon which the well is located is being drained, the operator is requested to seek an appropriate order from the Board establishing drilling and spacing units in conformance with such analysis by filing a Request for Agency Action with the Board.

	STATE OF UTAH DEPARTMENT OF NATURAL RESOURCE DIVISION OF OIL, GAS AND MININ		FORM 9 5 I FASC DESIGNATION AND SERIAL NUMBER: UTU- 077547
SUNDR	Y NOTICES AND REPORTS C	ON WELLS	6 FINDIAN, ALLOTTEE OR TRIBE NAME: N/A 7. UNIT & CA AGREEMENT NAME:
Do not use this form for proposals to drift drift nor zontal	new wells significantly deepen existing wells below current b laterals Use APPLICATION FOR PERMIT TO DRILL form for	oottom-nois depth, seenser plugged <sub>i</sub> weils, or to or such proposials	undesignated
1. TYPE OF WELL OIL WELL	GAS WELL 🖉 OTHER		B. WELL NAME and NUMBER.     COTTONWOOD FED 23-41
2 NAME OF OPERATOR: Petro-Canada Resource	s (USA) Inc.		9. API NUMBER: 4300731250
3. ADDRLSS OF OPERATOR: 999 18th St, Suite 600 <sub>C</sub>		202-2499 (303) 297-2100	10. FIELD AND POOL, OR WILDCAT undesignated
4. LOCATION OF WELL FOOTAGES AT SURFACE. 1,503	3' FSL & 463' FEL NE/4 SE/4		COUNTY: Carbon
OTRIGTR, SECTION, TOWNSHIP, RI	NGE MERIDIAN SESE 23 13S 15E	S	STATE
11. CHECK APP	PROPRIATE BOXES TO INDICATE	NATURE OF NOTICE, REP	ORT, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
NOTICE OF INTENT     (Submit in Duplicate)     Approximate date work will shart:	ACIDIZE  ALTER CASING  CASING REPAIR	DEEPEN FRACTURE TREAT NEW CONSTRUCTION	REPERFORATE CURRENT FORMATION      SIDETRACK TO REPAR WELL      TEMPORARELY ABANDON
	CHANGE TO PREVIOUS PLANS	OPERATOR CHANGE PLUG AND ABANDON	UBING REPAIR
SUBSEQUENT REPORT (Sutorne) Original Form Only) Date of work completion:	CHANGE WELL NAME CHANGE WELL STATUS COMMINGLE PRODUCING FORMATIONS CONVERT WELL TYPE	PLUG BACK         PRODUCTION (START/RESUME)         RECLAMATION OF WELL SITE         RECOMPLETE - DIFFERENT FORMATIC	WATER DISPOSAL WATER SHUT OFF OTHER: Permit Extension
Petro-Canada Resource	COMPLETED OPERATIONS. Clearly show all pertin s (USA), Inc. hereby requests a one y i that has been requested		
	Approved by the Utah Division of Oil, Gas and Mining		DECEIVE JAN I 5 2008
COPY SINT TO OPERATOR Date: 1-17-2009 Initial: 125	Date: 01-16-05 By: Ball	E	DIV OF OIL, GAS & MINING
NAME (PLEASE PRINT) Marnie G	Sriffin	Agent for Petro	o-Canada Resources (USA), Inc.
(This space for State use only)	1		



# Application for Permit to Drill Request for Permit Extension Validation

(this form should accompany the Sundry Notice requesting permit extension)

API:4300731250Well Name:COTTONWOOD FED 23-41 UTU-077547Location:Sec 23 13S-15E SESE 1,503' FSL & 463' FEL NE4 SECompany Permit Issued to:Petro-Canada Resources (USA) Inc.Date Original Permit Issued:11/9/2006

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision.

Following is a checklist of some items related to the application, which should be verified.

If located on private land, has the ownership changed, if so, has the surface agreement been updated? Yes⊡No⊠

Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? Yes  $\Box$  No  $\Box$ 

Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? Yes  $\Box$  No  $\Box$ 

Have there been any changes to the access route including ownership, or rightof-way, which could affect the proposed location? Yes  $\Box$  No  $\Box$ 

Has the approved source of water for drilling changed? Yes□No☑

Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? Yes  $\Box$  No $\Box$ 

Is bonding still in place, which covers this proposed well? Yes ☑ No □

	MI	
Signature	V	
Title: Agent	-	

1/14/2008

Date

Representing: Petro-Canada Resources (USA) Inc.

	FORM 9				
DEPARTMENT OF NATURAL RESOURCES ONFIDENTIAL	5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-077547				
SUNDRY NOTICES AND REPORTS ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: N/A				
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to	7. UNIT or CA AGREEMENT NAME: undesignated				
drill horizontal laterals.     Use APPLICATION FOR PERMIT TO DRILL form for such proposals.       1. TYPE OF WELL     OIL WELL       OIL WELL     GAS WELL   OTHER	8. WELL NAME and NUMBER:				
2. NAME OF OPERATOR:	9. APLINUMBER:				
Petro-Canada Resources (USA) Inc.	4300731250				
3. ADDRESS OF OPERATOR:         PHONE NUMBER:           999 18th St, Suite 600         CHY         Denver         STATE         CO         21P         80202-2499         (303) 297-2100	10. FIELD AND POOL, OR WILDCAT:				
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1,503' FSL & 463' FEL,	COUNTY: Carbon				
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NESE 23 13S 15E S	STATE: UTAH				
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPO	RT, OR OTHER DATA				
TYPE OF SUBMISSION TYPE OF ACTION					
	REPERFORATE CURRENT FORMATION				
(Submit in Duplicate)					
Approximate date work will start:					
(Submit Original Form Only)	WATER SHUT-OFF				
Date of work completion:					
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. Petro-Canada Resources (USA), Inc. hereby requests a one year extension of the state permit for the referenced well. This is the second extension that has been requested with the original permit being approved 11/09/2006.					
Approved by the					
Utah Division of					
Oil, Gas and Mining					
Date: 12-22-005 By: Development					
NAME (PLEASE PRINT) Don Hamilton V TITLE Agent for Petro-C	Canada Resources (USA), Inc.				
signature Don Hamilton Date 12/17/2008					
(This space for State use only)	enter en la construction de				
(ture obtain the particular and parts)	NECEINAR				
COPY SENT TO OPERATOR					
(5/2000) Date: 12.v30.2008 (See Instructions on Reverse Side) Initials: K5	<b>DEC 1</b> 8 2008				
	DIV OF OIL, GAS & MINING				



## Application for Permit to Drill Request for Permit Extension Validation

(this form should accompany the Sundry Notice requesting permit extension)

API:4300731250Well Name:COTTONWOOD FED 23-41Location:1,503' FSL & 463' FEL, NESE, S. 23, T13S, R15E,Company Permit Issued to:Petro-Canada Resources (USA) Inc.Date Original Permit Issued:11/9/2006

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision.

Following is a checklist of some items related to the application, which should be verified.

If located on private land, has the ownership changed, if so, has the surface agreement been updated? Yes □No ☑

Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? Yes  $\square$  No  $\square$ 

Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? Yes  $\Box$  No  $\Box$ 

Have there been any changes to the access route including ownership, or rightof-way, which could affect the proposed location? Yes INO IZ

Has the approved source of water for drilling changed? Yes□No☑

Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? Yes INO

Is bonding still in place, which covers this proposed well? Yes ZNO□

Hamilton Signature

12/17/2008 Date

Title: Agent

Representing: Petro-Canada Resources (USA) Inc.

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING			FORM 9		
			5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-077547		
SUNDRY NOTICES AND REPORTS ON WELLS			6. IF INDIAN, ALLOTTEE OR TRIBE NAME:		
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.			7.UNIT or CA AGREEMENT NAME:		
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: COTTONWOOD FED 23-41				
2. NAME OF OPERATOR: PETRO-CANADA RESOURCES (USA), INC			9. API NUMBER: 43007312500000		
3. ADDRESS OF OPERATOR:PHONE NUMBER:999 18th Street, Sutie 600 , Denver, CO, 80202303 297-2100 Ext			9. FIELD and POOL or WILDCAT: WILDCAT		
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1503 FSL 0463 FEL			COUNTY: CARBON		
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NESE Section: 23 Township: 13.0S Range: 15.0E Meridian: S			STATE: UTAH		
11. CHE	CK APPROPRIATE BOXES TO INDICATE	NATURE OF NOTICE, REPORT,	OR OTHER DATA		
TYPE OF SUBMISSION	TYPE OF ACTION				
		ALTER CASING	CASING REPAIR		
<b>V</b> NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	CHANGE TUBING			
9/1/2010	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE		
SUBSEQUENT REPORT Date of Work Completion:		FRACTURE TREAT			
Date of Work Completion:	OPERATOR CHANGE	PLUG AND ABANDON	PLUG BACK		
	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION		
SPUD REPORT Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON		
		VENT OR FLARE	WATER DISPOSAL		
		SI TA STATUS EXTENSION	✓ APD EXTENSION		
	WILDCAT WELL DETERMINATION	OTHER	OTHER:		
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. Petro-Canada Resources (USA), Inc. hereby requests a one year extension of the state permit for the referenced well. This is the third extension that has been requested. Approved by the Utah Division of					
			Oil, Gas and Mining		
		D	ate: December 14, 2009		
By: Bally					
			70		
NAME (PLEASE PRINT) Don Hamilton	<b>PHONE NUMBER</b> 435 719-2018	<b>TITLE</b> Permitting Agent (Buys & Asso	ciates, Inc)		
SIGNATURE N/A		<b>DATE</b> 12/4/2009			



The Utah Division of Oil, Gas, and Mining

- State of Utah - Department of Natural Resources Electronic Permitting System - Sundry Notices

# **Request for Permit Extension Validation Well Number 43007312500000**

API: 43007312500000
Well Name: COTTONWOOD FED 23-41
Location: 1503 FSL 0463 FEL QTR NESE SEC 23 TWNP 130S RNG 150E MER S
Company Permit Issued to: PETRO-CANADA RESOURCES (USA), INC
Date Original Permit Issued: 11/9/2006

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

- If located on private land, has the ownership changed, if so, has the surface agreement been updated? () Yes () No
- Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? () Yes () No
- Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? 
  Yes 
  No
- Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location? () Yes () No

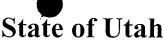
• Has the approved source of water for drilling changed? 🔘 Yes 🖲 No

- Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? () Yes () No
- Is bonding still in place, which covers this proposed well? 🔘 Yes 🗍

### Approved by the No Utah Division of Oil, Gas and Mining

Signature: Don Hamilton Date: 12/4/2009 Title: Permitting Agent (Buys & Associates, Inc) Representing: PETRO-CANDARESOURCES





DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER Executive Director

GREGORY S. BELL Lieutenant Governor Division of Oil, Gas and Mining JOHN R. BAZA Division Director

January 19, 2011

Petro-Canada Resources (USA) Inc. 999 18<sup>TH</sup> St, Suite 600 Denver, CO 80202

# Re: <u>APD Rescinded – Cottonwood Fed 23-41, Sec. 23, T. 13S, R. 15E</u> Carbon County, Utah API No. 43-007-31250

Ladies and Gentlemen:

The Application for Permit to Drill (APD) for the subject well was approved by the Division of Oil, Gas and Mining (Division) on November 9, 2006. On January 16, 2008, December 22, 2008 and December 14, 2009 the Division granted a one-year APD extension. No drilling activity at this location has been reported to the division. Therefore, approval to drill the well is hereby rescinded, effective January 19, 2011.

A new APD must be filed with this office for approval <u>prior</u> to the commencement of any future work on the subject location.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division immediately.

Sincerely,

nellason

Diana Mason Environmental Scientist

cc:

Well File Bureau of Land Management, Price

