

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 24-31** - 2,007' FSL & 1,957' FWL, NE/4 SW/4,  
Section 24, 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. 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,

*Don Hamilton*

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

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UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		7. If Unit or CA Agreement, Name and No. N/A
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input checked="" type="checkbox"/> Multiple Zone		8. Lease Name and Well No. Cottonwood Fed 24-31
2. Name of Operator Petro-Canada Resources (USA), Inc.		9. API Well No. 43-007-31254
3a. Address 1099-18th Street, Suite 400 Denver, Colorado 80202	3b. Phone No. (include area code) 303-297-2100	10. Field and Pool, or Exploratory undesignated W:1011A-B
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface 5691087 2,007' FSL & 1,957' FWL, NE/4 SW/4, 4392134Y -110.187313 At proposed prod. zone 2,007' FSL & 1,957' FWL, NE/4 SW/4, 39.678077		11. Sec., T. R. M. or Blk. and Survey or Area Section 24, T13S, R15E, SLB&M
14. Distance in miles and direction from nearest town or post office* 13.75 miles northeast of Sunnyside, Utah		12. County or Parish Carbon
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 600'		13. State UT
16. No. of acres in lease 1,440 acres	17. Spacing Unit dedicated to this well 40 acres	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 2,100'	19. Proposed Depth 11,000'	20. BLM/BIA Bond No. on file UT 1215
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 7,880' GR	22. Approximate date work will start* 05/01/2007	23. Estimated duration 35 days drilling 40 days completion

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, must be attached to this form:

- |  |   |
|--|---|
| 1. Well plat certified by a registered surveyor.   | 4. Bond to cover the operations unless covered by an existing bond on file (see item 20 above). |
| 2. A Drilling Plan.  | 5. Operator certification   |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the BLM.             |

25. Signature <i>Don Hamilton</i>	Name (Printed/Typed) Don Hamilton	Date 11/07/2006
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Title  
Agent for Petro-Canada Resources (USA), Inc.

Approved by (Signature) <i>Bradley G. Hill</i>	Name (Printed/Typed) BRADLEY G. HILL	Date 11-09-06
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Title  
Off ENVIRONMENTAL MANAGER

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.  
Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*(Instructions on page 2)

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**Federal Approval of this  
Action is Necessary**

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T13S, R15E, S.L.B.&M.

R  
15  
E

PETRO-CANADA RESOURCES (USA), INC.

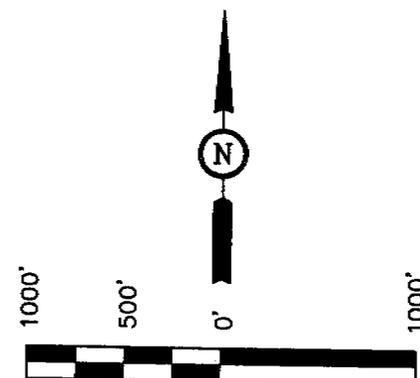
Well location, COTTONWOOD FEDERAL #24-31, located as shown in the NE 1/4 SW 1/4 of Section 24, T13S, R15E, S.L.B.&M., Carbon County, Utah.

BASIS OF ELEVATION

COTTON TRIANGULATION STATION, LOCATED IN THE NW 1/4 OF SECTION 31, T12S, R16E, S.L.B.&M. TAKEN FROM THE TWIN HOLLOW, CARBON COUNTY, QUADRANGLE, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 7386 FEET.

BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.



SCALE

CERTIFICATION

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEY MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAID AREAS DO NOT CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

*[Signature]*  
REGISTERED LAND SURVEYOR  
REGISTRATION NO. 174831  
STATE OF UTAH

UINTAH ENGINEERING & LAND SURVEYING  
85 SOUTH 200 EAST - VERNAL, UTAH 84078  
(435) 789-1017

SCALE 1" = 1000'	DATE SURVEYED: 09-18-06	DATE DRAWN: 09-21-06
PARTY J.R. R.P. C.H.	REFERENCES G.L.O. PLAT	
WEATHER WARM	FILE PETRO-CANADA RESOURCES (USA), INC.	

N89°50'W - 5273.40' (G.L.O.)

N00°01'W - 2640.00' (G.L.O.)

S00°33'51"W - 2606.94' (Meas.)

S280.00' (G.L.O.)

270°04' (G.L.O.)

Set Marked Stone,  
(1) Bearing Tree

24

COTTONWOOD FEDERAL #24-31  
Elev. Ungraded Ground = 7880'

1957'  
(Comp.)

2007'  
(Comp.)

N44°53'18"E  
2801.08'

90°05'  
(G.L.O.)

Set Marked Stone  
1.0' High

5278.68' (G.L.O.)

LEGEND:

- └─┘ = 90° SYMBOL
- = PROPOSED WELL HEAD.
- ▲ = SECTION CORNERS LOCATED.

(AUTONOMOUS NAD 83)  
LATITUDE = 39°40'40.99" (39.678053)  
LONGITUDE = 110°11'16.80" (110.188000)  
(AUTONOMOUS NAD 27)  
LATITUDE = 39°40'41.12" (39.678089)  
LONGITUDE = 110°11'14.25" (110.187292)

# DRILLING PLAN

## Attachment for Permit to Drill

**Name of Operator:** Petro-Canada Resources (USA), Inc.  
**Address:** 1099 - 18<sup>th</sup> Street, Suite 400  
Denver, CO 80202  
**Well Location:** Cottonwood Fed 24-31  
2,007' FSL & 1,957' FWL, NE/4 SW/4  
Section 24, T13S, R15E  
Carbon County, UT

### 1. GEOLOGIC SURFACE FORMATION

Green River

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

<u>Formation</u>	<u>Depth</u>
Green River	Surface
Wasatch	2,600'*
Price River	6,100' *
Castlegate	8,100' *
Blackhawk	8,400' *
Starpoint	8,700' *
Mancos	9,100' *
TD	11,000'

\* PROSPECTIVE PAY

### 4. PROPOSED CASING PROGRAM

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

<u>Type</u>	<u>Size</u>	<u>Weight</u>	<u>Grade</u>	<u>Conn.</u>	<u>Top</u>	<u>Bottom</u>	<u>Hole</u>
Surface	9.625"	43.5 ppf	L-80	STC	0'	1,150'	12-1/4"
Production	5.5"	20.0 ppf	P-110	LTC	0'	11,000'	7-7/8"

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## DRILLING PLAN

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

Surface hole: No BOPE will be utilized.

Production hole: 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>	<u>Mud Weight (ppg)</u>	<u>Viscosity</u>	<u>Fluid Loss</u>	<u>Remarks</u>
0 - 40'	8.3 - 8.6	27-40	--	Native Spud Mud
40' - 1,150'	8.3 - 8.6	27-40	15 cc or less	Native/Gel/Lime
1,150' - TD	8.6 - 9.5	38-46	15 cc or less	Potassium Formate

### 7. BLOOIE LINE

- 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  
              Preserve samples all show intervals  
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.

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## 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: 133 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: 1059 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.  
373 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 2,100'.  
Volume is log caliper +10%

### 13. ANTICIPATED STARTING DATE AND DURATION OF THE OPERATIONS

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

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## SURFACE USE PLAN

### *Attachment for Permit to Drill*

**Name of Operator:** Petro-Canada Resources (USA), Inc.  
**Address:** 1099 – 18<sup>th</sup> Street, Suite 400  
Denver, CO 80202  
**Well Location:** Cottonwood Fed 24-31  
2,007' FSL & 1,957' FWL, NE/4 SW/4  
Section 24, 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 2:35 pm. In attendance at the onsite inspections were the following individuals:

Don Stephens	Geologist	Bureau of Land Management—Price
Jeff Brower	Hydrologist	Bureau of Land Management—Price
David Waller	Wildlife Biologist	Bureau of Land Management—Price
Bill James	Habitat Manager	Division of Wildlife Resources
Nathan Sill	Habitat Biologist	Division of Wildlife Resources
Danny Rasmussen	Surveyor	Uintah Engineering & Land Surveying
Ryan Robinson	Survey Hand	Uintah Engineering & Land Surveying
Alan Vrooman	Regulatory Manager	Petro-Canada Resources (USA), Inc.
Don Hamilton	Agent	Buys & Associates, Inc.

1. Existing Roads:

- a. The proposed well site is located approximately 13.75 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. Planned Access Roads:

- 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 1.0 miles. From that point a new access is proposed trending north approximately 170' 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.
- l. All access roads and surface disturbing activities will conform to the standards outlined in the Bureau of Land Management and Forest Service publication: Surface Operating Standards 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 year-round 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 southeast side of the well site and traverse 120' south to the proposed Cottonwood Fed 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 120' 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. Source of Construction Material:

- 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. Methods of Handling Waste Disposal:

- 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.
- l. 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. Ancillary Facilities:

- 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. Well Site Layout: (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 south.
- 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 from 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.
- l. 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:

- 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

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

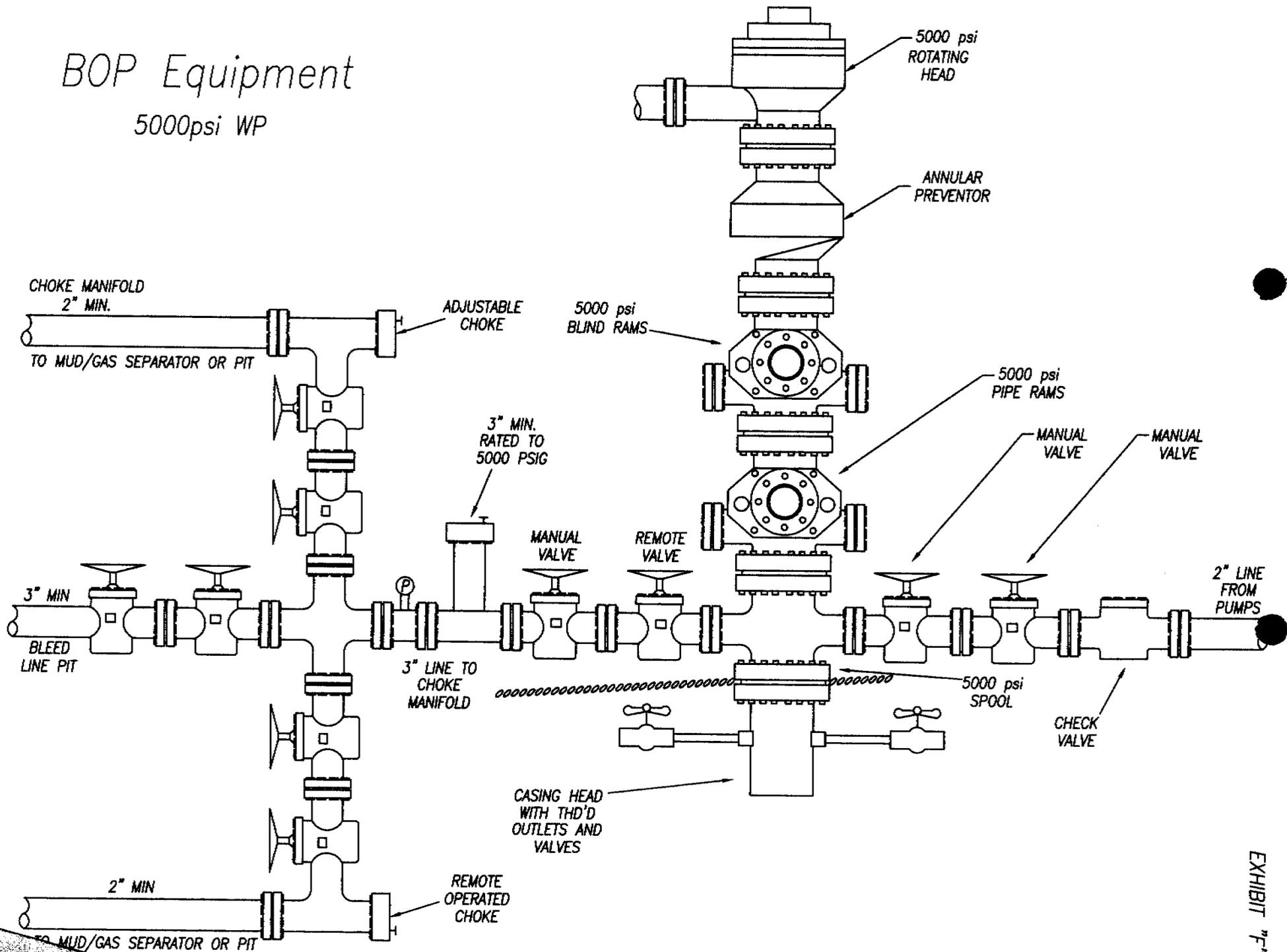
Certification:

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

# BOP Equipment

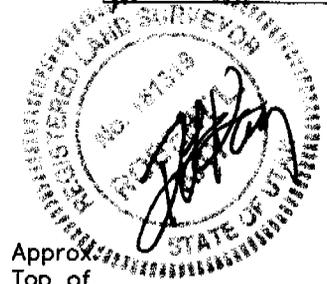
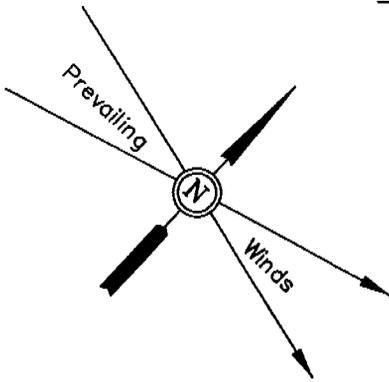
5000psi WP



PETRO-CANADA RESOURCES (USA), INC.

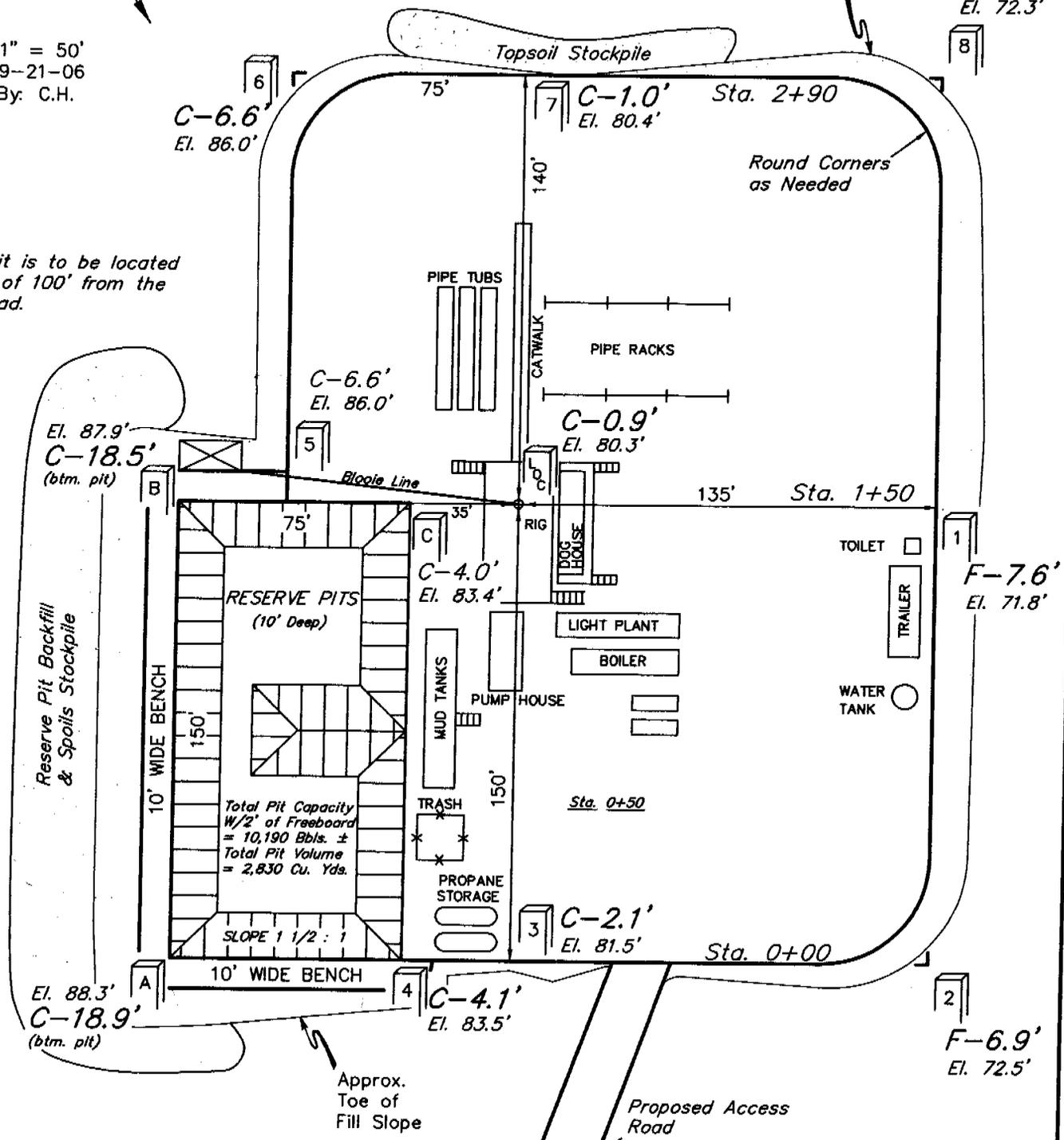
FIGURE #1

LOCATION LAYOUT FOR  
 COTTONWOOD FEDERAL #24-31  
 SECTION 24, T13S, R15E, S.L.B.&M.  
 2007' FSL 1957' FWL



SCALE: 1" = 50'  
 DATE: 09-21-06  
 Drawn By: C.H.

**NOTE:**  
 Flare Pit is to be located  
 a min. of 100' from the  
 Well Head.

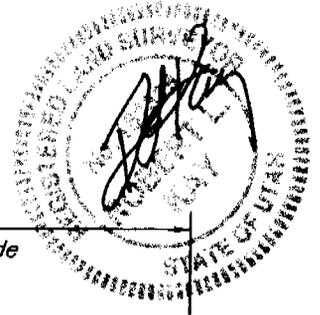


**NOTES:**

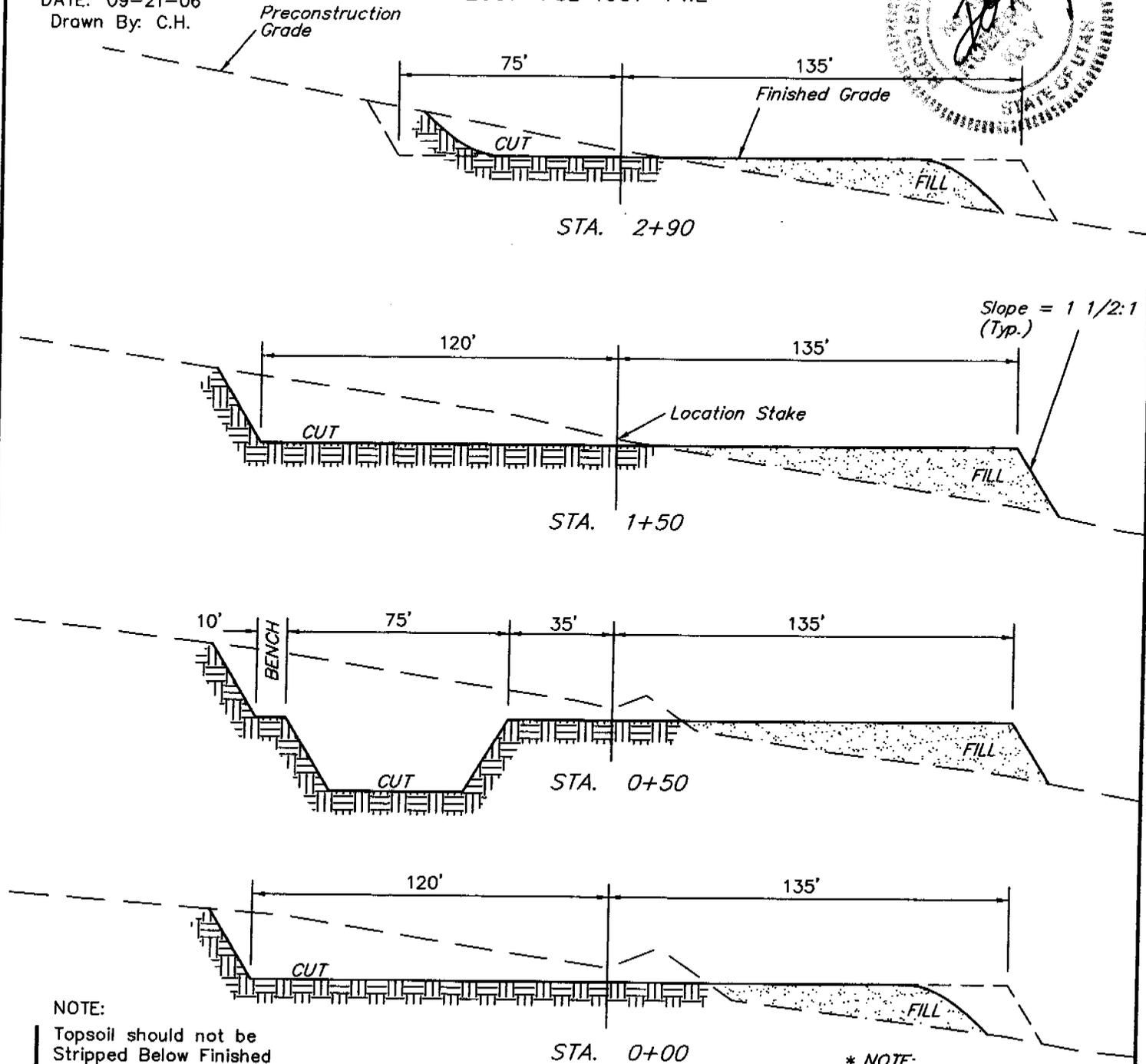
Elev. Ungraded Ground At Loc. Stake = 7880.3'  
 FINISHED GRADE ELEV. AT LOC. STAKE = 7879.4'

TYPICAL CROSS SECTIONS FOR  
COTTONWOOD FEDERAL #24-31  
SECTION 24, T13S, R15E, S.L.B.&M.  
2007' FSL 1957' FWL

X-Section Scale  
1" = 20'  
1" = 50'



DATE: 09-21-06  
Drawn By: C.H.



NOTE:  
Topsoil should not be Stripped Below Finished Grade on Substructure Area.

\* NOTE:  
FILL QUANTITY INCLUDES 5% FOR COMPACTION

APPROXIMATE YARDAGES

CUT	
(6") Topsoil Stripping	= 1,540 Cu. Yds.
Remaining Location	= 8,670 Cu. Yds.
<b>TOTAL CUT</b>	<b>= 10,210 CU.YDS.</b>
<b>FILL</b>	<b>= 6,710 CU.YDS.</b>

EXCESS MATERIAL	= 3,500 Cu. Yds.
Topsoil & Pit Backfill (1/2 Pit Vol.)	= 2,960 Cu. Yds.
EXCESS UNBALANCE (After Interim Rehabilitation)	= 540 Cu. Yds.

**PETRO-CANADA RESOURCES (USA), INC.**  
**COTTONWOOD FEDERAL #24-31**  
**LOCATED IN CARBON COUNTY, UTAH**  
**SECTION 24, T13S, R15E, S.L.B.&M.**



**PHOTO: VIEW OF LOCATION STAKE**

**CAMERA ANGLE: NORTHEASTERLY**



**PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS**

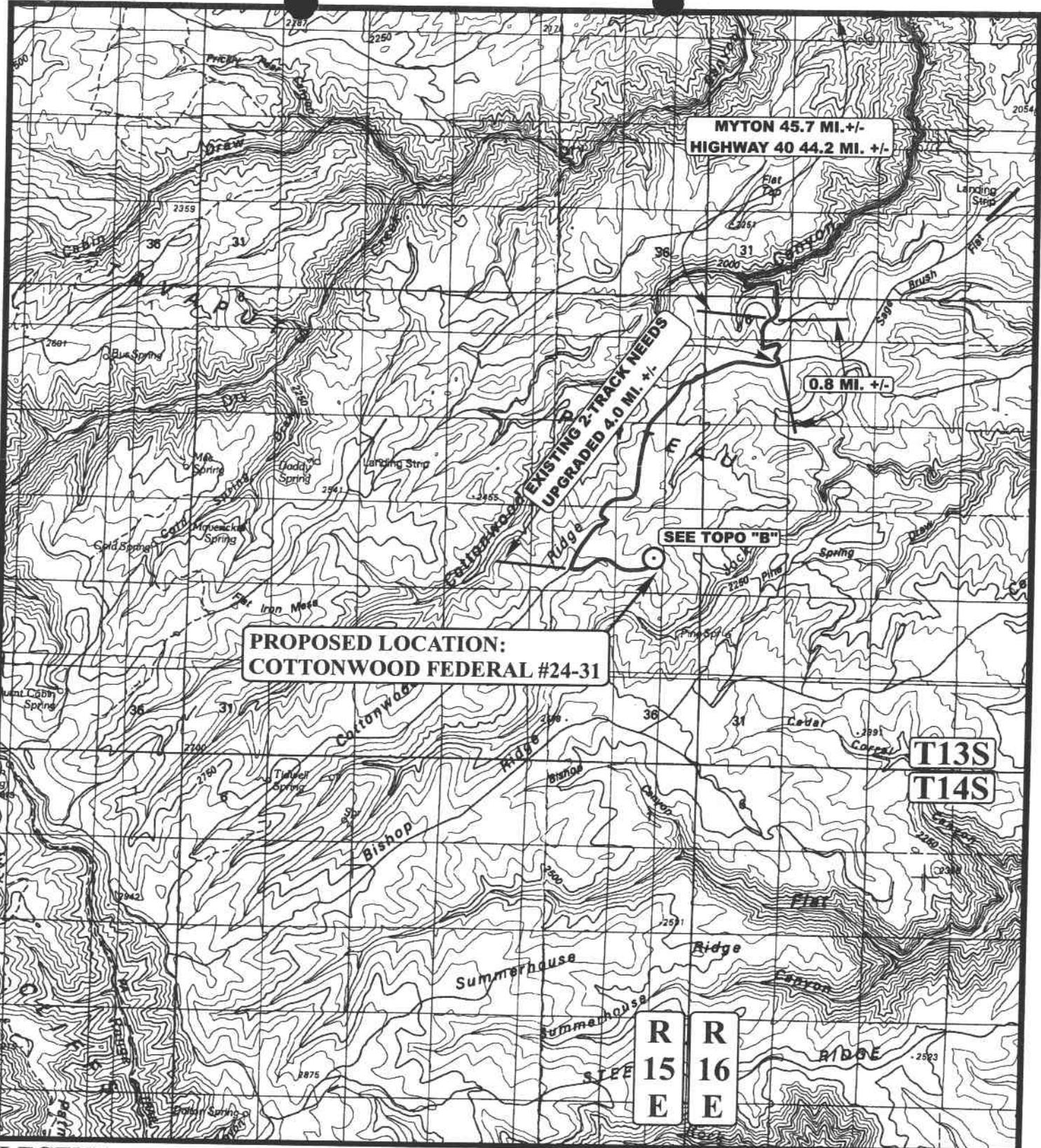
**CAMERA ANGLE: NORTHWESTERLY**



- Since 1964 -

**U ELS** Uintah Engineering & Land Surveying  
 85 South 200 East Vernal, Utah 84078  
 435-789-1017 uels@uelsinc.com

LOCATION PHOTOS	09	22	06	PHOTO
	MONTH	DAY	YEAR	
TAKEN BY: B.B.	DRAWN BY: L.K.		REVISED: 00-00-00	



**LEGEND:**

○ PROPOSED LOCATION



**PETRO-CANADA RESOURCES (USA), INC.**

COTTONWOOD FEDERAL #24-31  
 SECTION 24, T13S, R15E, S.L.B.&M.  
 2007' FSL 1957' FWL



Uintah Engineering & Land Surveying  
 85 South 200 East Vernal, Utah 84078  
 (435) 789-1017 \* FAX (435) 789-1813

TOPOGRAPHIC  
 MAP

09 22 06  
 MONTH DAY YEAR

SCALE: 1:100,000

DRAWN BY: L.K.

REVISED: 00-00-00



T13S

EXISTING 2-TRACK NEEDS  
UPGRADED 4.0 MILES  
HIGHWAY 40 49.0 MI. +/-  
MYTON 50.5 MI. +/-

PROPOSED LOCATION:  
COTTONWOOD FEDERAL #24-31

PROPOSED ACCESS 170' +/-

PROPOSED ACCESS FOR  
THE #24-43 1.0 MI. +/-

#24-43

R  
15  
E

R  
16  
E

LEGEND:

- PROPOSED ACCESS ROAD
- EXISTING ROAD

PETRO-CANADA RESOURCES (USA), INC.

COTTONWOOD FEDERAL #24-31  
SECTION 24, T13S, R15E, S.L.B.&M.  
2007' FSL 1957' FWL



Uintah Engineering & Land Surveying  
85 South 200 East Vernal, Utah 84078  
(435) 789-1017 \* FAX (435) 789-1813



TOPOGRAPHIC  
MAP

09 22 06  
MONTH DAY YEAR

SCALE: 1" = 2000' DRAWN BY: L.K. REVISED: 00-00-00



T13S

PROPOSED LOCATION:  
COTTONWOOD FEDERAL #24-31

PROPOSED PIPELINE  
FOR THE #24-43 WELL

PROPOSED PIPELINE

PROPOSED ACCESS ROAD

TIE-IN POINT

2-49

#24-43

R  
15  
E

APPROXIMATE TOTAL PIPELINE DISTANCE = 120' +/-

**LEGEND:**

-  PROPOSED ACCESS ROAD
-  EXISTING PIPELINE
-  PROPOSED PIPELINE
-  PROPOSED PIPELINE (SERVICING OTHER WELLS)

**PETRO-CANADA RESOURCES (USA), INC.**

**COTTONWOOD FEDERAL #24-31**  
**SECTION 24, T13S, R15E, S.L.B.&M.**  
**2007' FSL 1957' FWL**



**Uintah Engineering & Land Surveying**  
85 South 200 East Vernal, Utah 84078  
(435) 789-1017 \* FAX (435) 789-1813



**TOPOGRAPHIC** 09 22 06  
**MAP** MONTH DAY YEAR  
SCALE: 1" = 1000' DRAWN BY: L.K. REVISED: 00-00-00



**WORKSHEET  
APPLICATION FOR PERMIT TO DRILL**

APD RECEIVED: 11/09/2006

API NO. ASSIGNED: 43-007-31254

WELL NAME: COTTONWOOD FED 24-31  
 OPERATOR: PETRO-CANADA RESOURCES ( N2705 )  
 CONTACT: DON HAMILTON

PHONE NUMBER: 303-297-2100

PROPOSED LOCATION:

NESW 24 130S 150E  
 SURFACE: 2007 FSL 1957 FWL  
 BOTTOM: 2007 FSL 1957 FWL  
 COUNTY: CARBON  
 LATITUDE: 39.67808 LONGITUDE: -110.1873  
 UTM SURF EASTINGS: 569698 NORTHINGS: 4392134  
 FIELD NAME: WILDCAT ( 1 )

INSPECT LOCATN BY: / /		
Tech Review	Initials	Date
Engineering		
Geology		
Surface		

LEASE TYPE: 1 - Federal  
 LEASE NUMBER: UTU-077547  
 SURFACE OWNER: 1 - Federal

PROPOSED FORMATION: MNCS  
 COALBED METHANE WELL? NO

RECEIVED AND/OR REVIEWED:

- Plat
- Bond: Fed[1] Ind[] Sta[] Fee[]  
(No. UT 1215 )
- Potash (Y/N)
- Oil Shale 190-5 (B) or 190-3 or 190-13
- Water Permit  
(No. 90-1542 )
- RDCC Review (Y/N)  
(Date: \_\_\_\_\_ )
- Fee Surf Agreement (Y/N)
- Intent to Commingle (Y/N)

LOCATION AND SITING:

- R649-2-3.
- Unit: \_\_\_\_\_
- R649-3-2. General  
Siting: 460 From Qtr/Qtr & 920' Between Wells
- R649-3-3. Exception
- Drilling Unit  
Board Cause No: \_\_\_\_\_  
Eff Date: \_\_\_\_\_  
Siting: \_\_\_\_\_
- R649-3-11. Directional Drill

COMMENTS: \_\_\_\_\_

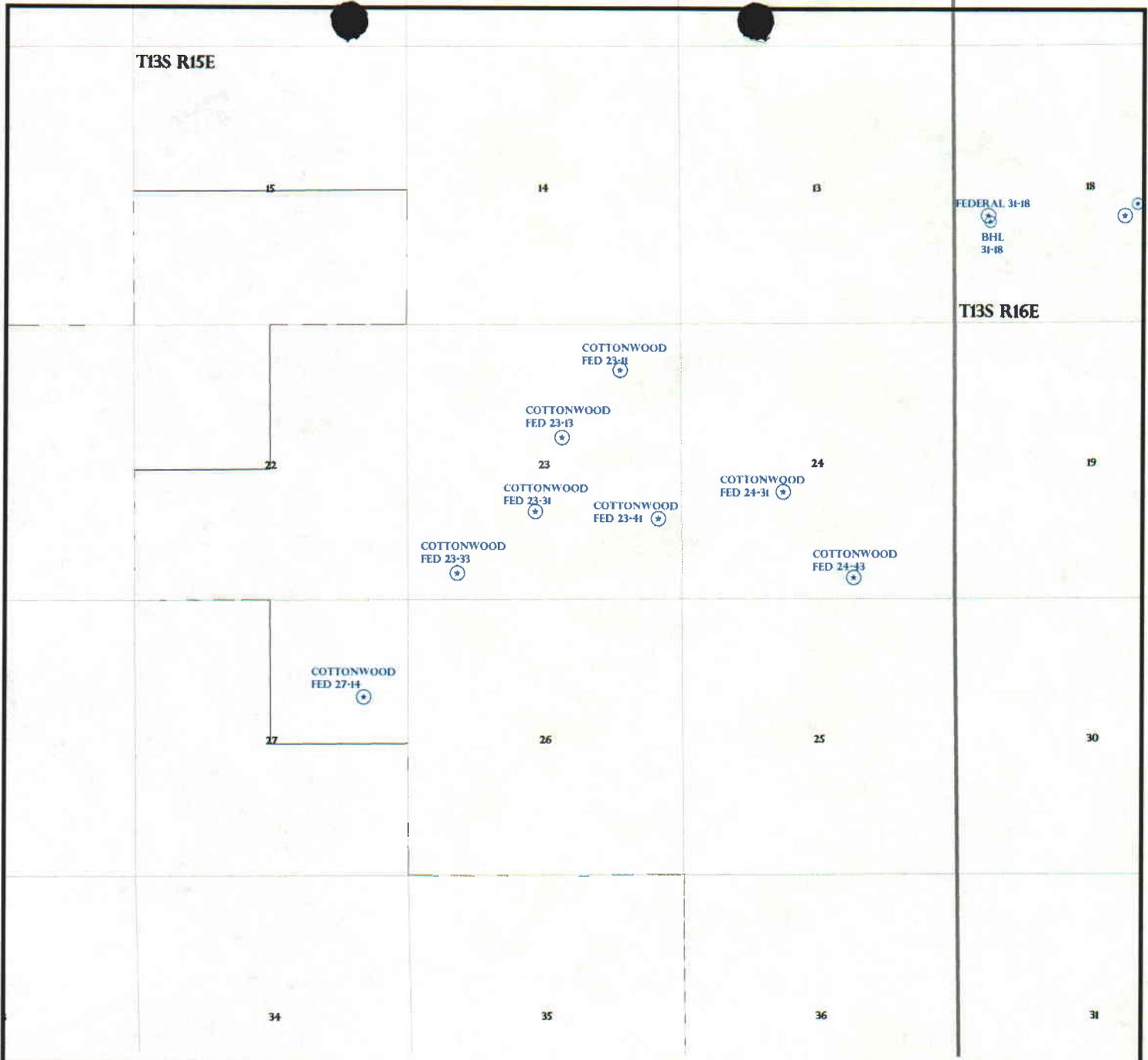
STIPULATIONS: 1- Federal Approval

2- Spacing Strip

T13S R15E

FEDERAL 31-18  
BHL  
31-18

T13S R16E



OPERATOR: PETRO-CANADA RES (N2705)

SEC: 24 T.13S R. 15E

FIELD: WILDCAT (001)

COUNTY: CARBON

SPACING: R649-3-2 / GENERAL SITING

**Wells Status**

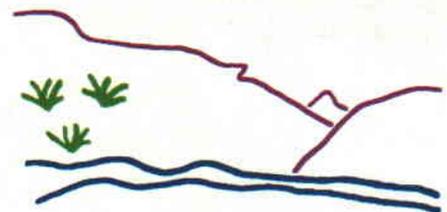
- GAS INJECTION
- GAS STORAGE
- LOCATION ABANDONED
- NEW LOCATION
- PLUGGED & ABANDONED
- PRODUCING GAS
- PRODUCING OIL
- SHUT-IN GAS
- SHUT-IN OIL
- TEMP. ABANDONED
- TEST WELL
- WATER INJECTION
- WATER SUPPLY
- WATER DISPOSAL
- DRILLING

**Field Status**

- ABANDONED
- ACTIVE
- COMBINED
- INACTIVE
- PROPOSED
- STORAGE
- TERMINATED

**Unit Status**

- EXPLORATORY
- GAS STORAGE
- NF PP OIL
- NF SECONDARY
- PENDING
- PI OIL
- PP GAS
- PP GEOTHERML
- PP OIL
- SECONDARY
- TERMINATED



Utah Oil Gas and Mining



PREPARED BY: DIANA MASON  
DATE: 9-NOVEMBER-2006



**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: Cottonwood Federal 24-31 Well, 2007' FSL, 1957' FWL, NE SW, Sec. 24,  
T. 13 South, R. 15 East, Carbon County, Utah

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.

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 43-007-31254.

Sincerely,

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 Cottonwood Federal 24-31  
API Number: 43-007-31254  
Lease: UTU-077547

Location: NE SW                      Sec. 24                      T. 13 South                      R. 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.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No. UTU-077547	
6. If Indian, Allottee or Tribe Name N/A	
7. If Unit or CA Agreement, Name and No. N/A	
8. Lease Name and Well No. Cottonwood Fed 24-31	
9. API Well No. 4300731254	
1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER	10. Field and Pool, or Exploratory undesignated
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input checked="" type="checkbox"/> Multiple Zone	11. Sec., T. R. M. or Blk. and Survey or Area Section 24, T13S, R15E, SLB&M
2. Name of Operator Petro-Canada Resources (USA), Inc.	12. County or Parish Carbon
3a. Address 1099-18th Street, Suite 400 Denver, Colorado 80202	13. State UT
3b. Phone No. (include area code) 303-297-2100	14. Distance in miles and direction from nearest town or post office* 13.75 miles northeast of Sunnyside, Utah
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface 2,007' FSL & 1,957' FWL, NE/4 SW/4, At proposed prod. zone 2,007' FSL & 1,957' FWL, NE/4 SW/4,	15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 600'
16. No. of acres in lease 1,440 acres	17. Spacing Unit dedicated to this well 40 acres
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 2,100'	19. Proposed Depth 11,000'
20. BLM/BIA Bond No. on file UT 1215	21. Elevations (Show whether DF, KDB, RT, GL, etc.) 7,880' GR
22. Approximate date work will start* 05/01/2007	23. Estimated duration 35 days drilling 40 days completion

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, must be attached to this form:

- |  |   |
|--|---|
| 1. Well plat certified by a registered surveyor.   | 4. Bond to cover the operations unless covered by an existing bond on file (see item 20 above). |
| 2. A Drilling Plan.  | 5. Operator certification   |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the BLM.             |

25. Signature <i>Don Hamilton</i>	Name (Printed/Typed) Don Hamilton	Date 11/07/2006
--------------------------------------	--------------------------------------	--------------------

Title  
Agent for Petro-Canada Resources (USA), Inc.

Approved by (Signature) <i>[Signature]</i>	Name (Printed/Typed) [Name]	Date 11/19/07
---	--------------------------------	------------------

Title  
Assistant Field Manager,  
Division of Resources

Office  
Division of Resources  
Moab Field Office

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.  
Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*(Instructions on page 2)

CONDITIONS OF APPROVAL ATTACHED

RECEIVED  
JUN 25 2007

DIV. OF OIL, GAS & MINING

RECEIVED  
MOAB FIELD OFFICE  
NOV - 7 P 1:26  
DEPT. OF THE INTERIOR  
BUREAU OF LAND MGMT

T13S, R15E, S.L.B.&M.

R 15  
E 16

PETRO-CANADA RESOURCES (USA), INC.

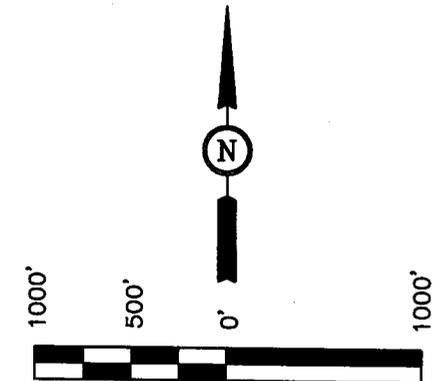
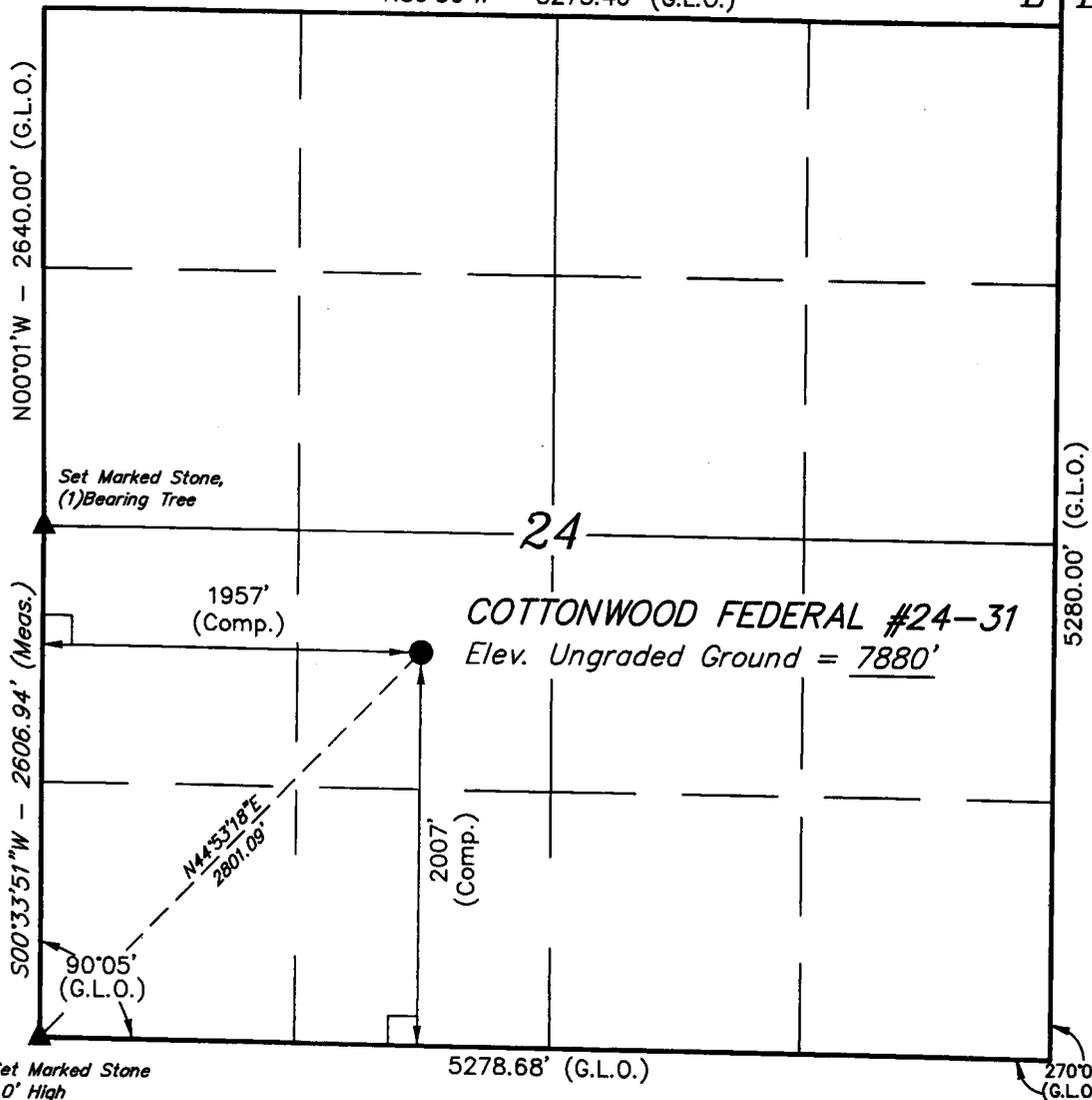
Well location, COTTONWOOD FEDERAL #24-31, located as shown in the NE 1/4 SW 1/4 of Section 24, T13S, R15E, S.L.B.&M., Carbon County, Utah.

BASIS OF ELEVATION

COTTON TRIANGULATION STATION, LOCATED IN THE NW 1/4 OF SECTION 31, T12S, R16E, S.L.B.&M. TAKEN FROM THE TWIN HOLLOW, CARBON COUNTY, QUADRANGLE, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 7386 FEET.

BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.



SCALE

CERTIFICATE  
 THIS IS TO CERTIFY THAT THE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEY MADE BY ME OR UNDER MY SUPERVISION AND THAT THE INFORMATION CONTAINED THEREIN IS TRUE TO THE BEST OF MY KNOWLEDGE AND BELIEF.  
 ROBERT L. KAY  
 REGISTERED LAND SURVEYOR  
 STATE OF UTAH

LEGEND:

- └─┘ = 90° SYMBOL
- = PROPOSED WELL HEAD.
- ▲ = SECTION CORNERS LOCATED.

(AUTONOMOUS NAD 83)  
 LATITUDE = 39°40'40.99" (39.678053)  
 LONGITUDE = 110°11'16.80" (110.188000)  
 (AUTONOMOUS NAD 27)  
 LATITUDE = 39°40'41.12" (39.678089)  
 LONGITUDE = 110°11'14.25" (110.187292)

UINTAH ENGINEERING & LAND SURVEYING

85 SOUTH 200 EAST - VERNAL, UTAH 84078

(435) 789-1017

SCALE 1" = 1000'	DATE SURVEYED: 09-18-06	DATE DRAWN: 09-21-06
PARTY J.R. R.P. C.H.	REFERENCES G.L.O. PLAT	
WEATHER WARM	FILE PETRO-CANADA RESOURCES (USA), INC.	

Petro-Canada Resources (USA), Inc.  
**Cottonwood Federal 24-31**  
Lease UTU-77547  
NE/SW Sec. 24, T13S, R15E  
Carbon County, Utah

**A COMPLETE COPY OF THIS APPROVED PERMIT and Conditions of Approval shall be maintained on location during all construction and drilling operations, and shall be available to contractors to ensure compliance.**

#### CONDITIONS OF APPROVAL

Approval of this application does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Be advised that Petro-Canada Resources (USA), Inc. is considered to be the operator of the above well and is responsible under the terms and conditions of the lease for the operations conducted on the leased lands.

Bond coverage for this well is provided by **UT 1215** (Principal – Petro-Canada Resources (USA), Inc.) via surety consent as provided for in 43 CFR 3104.2.

This office will hold the aforementioned operator and bond liable until the provisions of 43 CFR 3106.7-2 continuing responsibility are met.

This permit will be valid for a period of one year from the date of approval. After permit termination, a new application must be filed for approval.

All lease operations will be conducted in full compliance with applicable regulations (43 CFR 3100), Onshore Oil and Gas Orders, lease terms, notices to lessees, and the approved plan of operations. The operator is fully responsible for the actions of his subcontractors. Failure to comply with the provisions of this permit, including applicable regulations, stipulations, and/or approval conditions, will be considered a violation subject to the enforcement provisions of 43 CFR Subpart 3163.

## A. DRILLING PROGRAM

1. The proposed 5M BOP system is adequate for anticipated conditions. Installation, testing and operation of the system shall be in conformance with Onshore Oil and Gas Order No. 2.
2. Concurrent approval from the State of Utah, Division of Oil, Gas & Mining (DOGM) is required before conducting any surface disturbing activities.
3. Drilling reports, which describe the activities of each day, shall be submitted to the BLM Moab Field Office on a weekly, or more frequent, basis. In addition to a daily summary of activities, drilling reports shall include the drilling fluid weight, details of casing and cement, water flows, lost circulation zones and any other information that would contribute to our understanding of drilling conditions.
4. The production casing shall be cemented into place such that the top-of-cement extends a minimum of 100 feet into the surface casing, leaving no annular space exposed to open-hole. This shall be verified by a cement bond log (CBL) or other appropriate tool for determining top-of-cement, unless cement is circulated to surface.
5. If logging reveals that the cementing objectives were not met, remedial cementing will be required.
6. Locally, the Green River Formation is known to contain oil, gas, oil shale and tar sand deposits. However, the lateral occurrence, distribution and grade of the oil shale and tar sand deposits are not well defined. The operator shall pay particular attention to this section, and shall attempt to identify and describe any of these resources that may be penetrated. Any information obtained on these resources shall be included as part of the Well Completion Report.

**UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
Price Field Office  
Price, Utah**

**SURFACE USE  
CONDITIONS OF APPROVAL**

Project Name: Cottonwood Exploratory Drilling EA

Operator: Petro-Canada Resources (USA) Inc.

Wells: Cottonwood Federal 23-13, 23-33, 27-14, 24-31

**I Applicable Petro-Canada Exploratory Drilling EA - Alternative C**

Under this alternative, the project will be implemented as described in the Proposed Action, including adherence to *The Gold Book* standards, except that drilling procedures/techniques under Alternative C will be determined during the project through implementation of the following procedures:

- The well pads and the associated access roads will be constructed for the proposed 23-13, 23-33, 27-14, and 24-31 wells. Construction methods will be identical to those described in the Proposed Action (Sections 2.2.2 and 2.2.3).
- Wells 23-13, 23-33, 27-14, and 24-31 will be vertically drilled, completed, and tested. Drilling, completion and testing procedures will be identical to those described in the Proposed Action (Sections 2.2.4 and 2.2.5).
- After the drilling, completion and testing of the first four vertical wells is completed, an evaluation will be made to determine whether directional drilling of any or all of the four remaining wells (23-14, 23-31, 23-41, and 24-43) from the four existing well pads will be technically and economically feasible. This evaluation will be based on information gathered in the drilling of the initial wells and knowledge gained about site-specific geologic conditions.
- If it is determined by Petro-Canada and the BLM that directional drilling of any or all of the four remaining wells is technically and economically feasible from the 23-13, 23-33, 27-14, and 24-31 well pads, each well pad will be expanded by 0.2 acres, and such well or wells will be drilled directionally. As such, the surface locations for the proposed vertical wells they will replace, together with associated roads and pipelines, will be eliminated from the project.
- If it will be determined that directional drilling of any or all of the four remaining wells is not feasible from the 23-13, 23-33, 27-14, and 24-31 well pads, the well pads and access roads for such locations will be constructed, and such wells will be vertically drilled.

- Alternative C incorporates all other components of the Proposed Action. As such components may be modified by the elimination of up to four surface locations and associated roads and pipeline connections.

## **II Site Specific Conditions of Approval**

- A pre-construction field meeting may be conducted prior to beginning any dirt work approved under this APD. The operator shall contact the BLM Authorized Officer Don Stephens @ 435-636-3608 at least 48-hours prior to beginning operations so that the meeting can be scheduled. The operator is responsible for having all contractors present (dirt contractors, drilling contractor, pipeline contractor, project oversight personnel, etc.) including the overall field operations superintendent, and for providing all contractors copies of the approved APD(s), project map and BLM Conditions of Approval pertinent to the work that each will be doing.
- A Paleontologist acceptable to the BLM will monitor during surface disturbing activities. If paleontologic resources are uncovered during surface disturbing activities, the paleontologist shall immediately notify the Authorized Officer (AO). The AO will arrange for a determination of significance and, if necessary, recommend a recovery or avoidance plan.
- Petro-Canada will bury all pipelines.
- Petro-Canada will measure gas production on the well pad unless permission is granted for measurement at another place.
- All tanks shall be located on the well location except for the Cottonwood Federal 27-14 whose tanks shall be located on the Cottonwood Federal 23-33 location.
- In order to minimize watershed damage, exploration, drilling, and other development activity will be allowed only during the period from April 30 to November 1. This limitation does not apply to maintenance and operation of producing wells.
- No production tanks will be placed at the proposed Cottonwood Federal #27-14, as these facilities will be moved to Cottonwood Federal #23-33 to minimize visual and wildlife impacts.
- As the project is subject to UDAQ R307-205-2, Fugitive Dust, Petro-Canada will use water at construction sites and along roads, as necessary, to abate fugitive dust.
- As required by the Price River MFP, if cultural resources are uncovered during surface-disturbing activities, Petro-Canada will suspend operations at the site and immediately contact the AO, who will arrange for a determination of eligibility in consultation with the SHPO, and, if necessary, recommend a recovery or avoidance plan.
- Eligible historic properties will be avoided by the Proposed Action. At sites 42Cb1711 and 42Cb1738, the proposed pipeline will be routed north of the site boundaries. The proposed pipeline corridor will be

routed south of site 42Cb2528 site. At site 42Cb2593, it is recommended that construction activities be confined to the western portion of the pipeline corridor, outside of the site boundary.

- As required under 40 CFR 112.3(e), Petro-Canada will maintain a copy of the SPCC plan at each facility, if the facility is normally attended at least eight hours per day, or at the nearest field office if the facility is not so attended. Petro-Canada will also implement and adhere to SPCC plans in a manner such that any spill or accidental discharge of oil will be reported and remediated.
- All equipment and personnel used during drilling and construction activities will be restricted to only approved access roads.
- All permanent above-ground structures (e.g., production equipment, tanks, etc.) not subject to safety requirements will be painted to blend with the natural color of the landscape. The paint used will be a color which simulates "Standard Environmental Colors." The color selected is Olive Black, 5WA20-6. All facilities will be painted the designated color at the time of installation.
- No oil, lubricants, or toxic substances may be drained onto the ground surface.
- Petro-Canada will not allow any open burning of garbage or refuse at well sites or other facilities.
- Petro-Canada will repair or replace to current BLM standards any fences, cattleguards, gates, drift fences, and natural barriers that are damaged as a result of the Proposed Action. Cattleguards will be used instead of gates for livestock control on most road ROWs.
- To minimize wildlife mortality due to vehicle collisions, Petro-Canada will advise project personnel regarding appropriate speed limits in the Project Area. Employees and contractors will be educated about anti-poaching laws. If wildlife law violations are discovered, the offending employee will be subject to disciplinary action by Petro-Canada.
- Petro-Canada will eliminate the potential exposure of migratory birds to contaminated water.
- Prior to any surface-disturbing activities between April 1 and August 31, Petro-Canada or their contractor will survey all areas within 1/2-mile of proposed surface disturbance for the presence of raptor nests. If occupied/active raptor nests are found, construction will not occur during the critical nesting season for that species within the species-specific buffer, unless the nest is obscured from visual or noise-related impacts through vegetative or topographic screening. BLM biologists will determine spatial buffers based on site-specific vegetative and topographic features within the vicinity of the occupied nest.
- Please contact Don Stephens, Natural Resource Specialist, (435) 636-3608, Bureau of Land Management, Price Field Office, if there are any questions concerning these surface use COAs.

### III Standard Conditions of Approval

#### General

- Petro-Canada will provide georeferenced spatial data depicting as-built locations of all facilities, wells, roads, pipelines, power lines, and other related facilities to the BLM by November 1 of each year until completion of project construction activities has occurred
- Petro-Canada will inform their employees, contractors, and subcontractors about relevant Federal regulations intended to protect archaeological and cultural resources. All personnel will be informed that collecting artifacts, including arrowheads, is a violation of Federal law and that employees engaged in this activity will be subject to disciplinary action.

#### Construction

- Topsoil will be removed from constructed well locations including areas of cut and fill, and stockpile at the site. Topsoil will also be salvaged for use in reclamation on all other areas of surface disturbance (roads, pipelines, etc.). Clearly segregate topsoil from excess spoil material. Any topsoil stockpiled for one year or longer will be signed and stabilized with annual ryegrass or other suitable cover crop.
- The operator will not push soil material and overburden over side slopes or into drainages. All soil material disturbed will be placed in an area where it can be retrieved without creating additional undue surface disturbance and where it does not impede watershed and drainage flows.
- Construct the backslope no steeper than 1½:1, and construct the foreslope no steeper than 2:1, unless otherwise directed by the BLM Authorized Officer.
- Maintain a minimum 20-foot undisturbed vegetative border between toe-of-fill of pad and/or pit areas and the edge of adjacent drainages, unless otherwise directed by the BLM Authorized Officer.
- Reserve pits will be adequately fenced during and after drilling operations until the pit is reclaimed so as to effectively keep out wildlife and livestock. Adequate fencing, in lieu of more stringent requirements by the surface owner, is defined as follows: 1) Construction materials will consist of steel or wood posts. Three or four strand wire (smooth or barbed) fence or hog panel (16-foot length by 50-inch height) or plastic snow fence must be used with connectors such as fence staples, quick-connect clips, hog rings, hose clamps, twisted wire, etc. Electric fences will not be allowed; 2) Construction standards: Posts shall be firmly set in ground. If wire is used, it must be taut and evenly spaced, from ground level to top wire, to effectively keep out animals. Hog panels must be tied securely into posts and one another using fence staples, clamps, etc. Plastic snow fencing must be taut and sturdy. Fence must be at least 2-feet from edge of pit. 3 sides fenced before beginning drilling, the fourth side fenced immediately upon completion of drilling and prior to rig release. Fence must be left up and maintained in adequate condition until pit is closed.
- The reserve pit will be oriented to prevent collection of surface runoff. After the drilling rig is removed, the operator may need to construct a trench on the uphill side of the reserve pit to divert surface drainage around it. If constructed, the trench will be left intact until the pit is closed.

- The reserve pit will be lined with an impermeable liner if permeable subsurface material is encountered. An impermeable liner is any liner having a permeability less than  $10^{-7}$  cm/sec. The liner will be installed so that it will not leak and will be chemically compatible with all substances that may be put in the pit. Liners made of any man-made synthetic material will be of sufficient strength and thickness to withstand normal installation and pit use. In gravelly or rocky soils, a suitable bedding material such as sand will be used prior to installing the liner.
- Culverts will be placed on channel bottoms on firm, uniform beds, which have been shaped to accept them, and aligned parallel to the channel to minimize erosion. Backfill will be thoroughly compacted.
- The minimum diameter for culverts will be 18 inches. However, all culverts will be appropriately sized in accordance with standards in BLM Manual 9113.
- Pipeline construction shall not block nor change the natural course of any drainage. Pipelines shall cross perpendicular to drainages. Pipelines shall not be run parallel in drainage bottoms. Suspended pipelines shall provide adequate clearance for maximum runoff.
- Pipeline trenches shall be compacted during backfilling. Pipeline trenches shall be routinely inspected and maintained to ensure proper settling, stabilization and reclamation.
- The operator shall submit a Sundry Notice (Form 3160-5) to BLM for approval prior to construction of any new surface disturbing activities that are not specifically addressed in the approved APD.
- Surface disturbance will be limited to the approved location and access routes.
- No surface-disturbing activities will occur during muddy and wet periods (e.g., when soils are saturated and excessive rutting of more than four inches with multiple passes could occur).
- The edges of well pads will be feathered to blend with the surrounding landscape.
- Removal and disturbance of vegetation will be kept to a minimum through construction site management (e.g., using previously disturbed areas and existing easements where feasible, placing pipelines adjacent to roads, limiting well pad size, etc.).
- During the construction phase of the project, Petro-Canada will implement an intensive reclamation and weed control program after each segment of project completion. Petro-Canada will reseed all portions of wells pads and the ROW not utilized for the operational phase of the project. Post-construction seeding application will continue until determined successful by the BLM. Weed control will be conducted through an Approved Pesticide Use and Weed Control Plan from the AO.
- To reduce the spread or introduction of noxious and invasive weed species into the Project Area via project-related vehicles and equipment, Petro-Canada and its contractors will power-wash all construction equipment prior to the entering the Project Area.
- Areas used for spoil storage will be stripped of topsoil before spoil placement.

- Appropriate erosion control and revegetation measures will be employed. In areas with unstable soils where seeding alone may not adequately control erosion, grading will be used to minimize slopes and water bars will be installed on disturbed slopes. Erosion control efforts will be monitored by Petro-Canada and necessary modifications would be made to control erosion.
- Sufficient topsoil or other suitable materials to facilitate revegetation will be segregated from subsoils during all construction operations requiring excavation and will be returned to the surface upon completion of operations. Soils compacted during construction will be ripped and tilled as necessary prior to reseeded. Cut and fill sections on all roads and along pipelines will be revegetated with native species.
- During the activities of road maintenance, new road construction or the construction of well pads, if any standing live or dead trees are damaged, cut down or knocked over by grading or construction equipment, actions would be taken to remove the vegetation from the road or pad edge. These materials would either be chipped on site and dispersed along the road or pad edge or hauled to BLM approved locations and piled for disposal in a manner that would not present a fuel hazard. Piles must be located in openings so that no pile would be within 30 feet of standing live trees. The piled vegetation must also be located adjacent to and accessible by road.

### **Operations/Maintenance**

- Rat and mouse holes shall be filled and compacted from the bottom to the top immediately upon release of the drilling rig from the location.
- Hydrocarbons shall be put in test tanks on location during completion work. Produced water will be put in the reserve pit during completion work per Onshore Order #7.
- The only fluids/waste materials which are authorized to go into the reserve pit are RCRA exempt exploration and production wastes. These include drilling muds and cuttings, rigwash, and excess cement and certain completion & stimulation fluids defined by EPA as exempt. It does not include drilling rig waste, such as spent hydraulic fluids, used engine oil, used oil filter, empty cement, drilling mud, or other product sacks, empty paint, pipe dope, chemical or other product containers, and excess chemicals or chemical rinsate. Any evidence of non-exempt wastes being put into the reserve pit may result in the BLM Authorized Officer requiring specific testing and closure requirements.
- If this well is drilled during the fire season (June-October), the operator shall institute all necessary precautions to ensure that fire hazard is minimized, including but not limited to mowing vegetation on the access route(s) and well location(s), keeping fire fighting equipment readily available when drilling, etc.
- If possible, large-scale drilling and completion supplies will be transported to sites during hours of low use by the public.

- Personnel will be advised regarding appropriate speed limits (15 to 30 mph) in the Project Area, as defined by BLM Manual 9113 – Roads (BLM 1985) and the Surface Operating Standards for Oil and Gas Extraction and Development 4<sup>th</sup> Addition (BLM and USFS 2006).

### **Dry Hole/Reclamation**

- All disturbed lands associated with this project, including the pipelines, access roads, etc. will be expediently reclaimed and reseeded in accordance with the surface use plan and any pertinent site-specific COAs.
- The attached Seed Mixtures A & B and TMC 1: Browse Hand Planting Tubling Mixtures shall be used for reclamation.
- Disturbed lands will be re-contoured back to conform with existing undisturbed topography. No depressions will be left that trap water or form ponds.
- Reserve pits will be closed as soon as possible, unless the BLM Authorized Officer gives an extension. Squeezing of pit fluids and cuttings is prohibited. Pits must be dry of fluids or they must be removed via vac-truck or other environmentally acceptable method prior to backfilling, re-contouring and replacement of topsoil. Mud and cuttings left in pit must be buried at least 3-feet below re-contoured grade. The operator will be responsible for re-contouring any subsidence areas that develop from closing a pit before it is sufficiently dry.
- Before the location has been reshaped and prior to redistributing the topsoil, the operator will rip or scarify the drilling platform and access road on the contour, to a depth of at least 12 inches. The rippers are to be no farther than 24 inches apart.
- Distribute the topsoil evenly over the entire location and other disturbed areas. Prepare the seedbed by disking to a depth of 4-to-6 inches following the contour.
- Phased reclamation plans will be submitted to BLM for approval prior to individual POD facility abandonment via a Notice of Intent (NOI) Sundry Notice. Individual facilities, such as well locations, pipelines, discharge points, impoundments, etc. need to be addressed in these plans as they are no longer needed. Individual items that will need to be addressed in reclamation plans include:
  1. Pit closure
  2. Configuration of reshaped topography, drainage systems, and other surface manipulations
  3. Waste disposal
  4. Revegetation methods, including specific seed mix (pounds pure live seed/acre) and soil treatments (seedbed preparation, fertilization, mulching, etc.). On private surface, the landowner should be consulted for the specific seed mix.
  5. Other practices that will be used to reclaim and stabilize all disturbed areas, such as water bars, erosion fabric, hydro-mulching, etc.
  6. An estimate of the timetables for beginning and completing various reclamation operations relative to weather and local land uses.

7. Methods and measures that will be used to control noxious weeds, addressing both ingress and egress to the individual well or POD.

8. Decommissioning/removal of all surface facilities.

- A Notice of Intent to Abandon and a Subsequent Report of Abandonment must be submitted for abandonment approval.
- For performance bond release approval, a Final Abandonment Notice (with a surface owner release letter on split-estate) must be submitted prior to a final abandonment evaluation by BLM.
- Soil fertility testing and the addition of soil amendments may be required to stabilize some disturbed lands.
- Any mulch utilized for reclamation needs to be certified weed free.
- Waterbars are to be constructed at least one (1) foot deep, on the contour with approximately two (2) feet of drop per 100 feet of waterbar to ensure drainage, and extended into established vegetation. All waterbars are to be constructed with the berm on the downhill side to prevent the soft material from silting in the trench. The initial waterbar should be constructed at the top of the backslope. Subsequent waterbars should follow the following general spacing guidelines:

Slope (percent)	Spacing Interval (feet)
$\leq 2$	200
2 – 4	100
4 – 5	75
$\geq 5$	50

## Producing Well

- All internal combustion equipment will be kept in good working order.
- Landscape those areas not required for production to the surrounding topography as soon as possible.
- Reduce the backslope to 2:1 and the foreslope to 3:1, unless otherwise directed by the BLM Authorized Officer. Reduce slopes by pulling fill material up from foreslope into the toe of cut slopes.
- Production facilities (including dikes) must be placed on the cut portion of the location and a minimum of 15 feet from the toe of the back cut unless otherwise approved by the BLM Authorized Officer.
- Any spilled or leaked oil, produced water or treatment chemicals must be reported in accordance with NTL-3A and immediately cleaned up in accordance with BLM requirements. This includes clean-up and proper disposition of soils contaminated as a result of such spills/leaks.
- Distribute stockpiled topsoil evenly over those areas not required for production and reseed as recommended.

- Upgrade and maintain access roads and drainage control (e.g., culverts, drainage dips, ditching, crowning, surfacing, etc.) as necessary and as directed by the BLM Authorized Officer to prevent soil erosion and accommodate safe, environmentally-sound access.
- Prior to construction of production facilities not specifically addressed in the APD, the operator shall submit a Sundry Notice to the BLM Authorized Officer for approval.
- If not already required prior to constructing and drilling the well location, the operator shall immediately upgrade the entire access road to BLM standards (including topsoiling, crowning, ditching, drainage culverts, surfacing, etc.) to ensure safe, environmentally-sound, year-round access. This requirement does not supercede or apply where specific road requirements are addressed in the APD/POD surface use plan (e.g., two track road, spot upgrade, etc.)
- Waterbars shall be installed on all reclaimed pipeline corridors per the guidelines in D #12.

### **Roads and Pipelines**

- No road grades in excess of 15 percent will occur without written permission of the AO.
- Roads constructed on BLM lands shall be constructed to allow for drainage and erosion control. The operator is responsible for maintenance of all roads authorized through the lease or right-of-way. Construction and maintenance shall comply with BLM System Road Standards as described in BLM Manual Section 9113 and the BLM Gold Book standards, except as modified by BLM. Maintenance may include but is not limited to grading, applying gravel, snow removal, ditch cleaning, and headcut restoration/prevention.
- Topsoil from access roads and pipelines are to be wind rowed along the uphill side of the road or stored in an approved manner. When the road and pipeline is rehabilitated, this soil will then be used as a top coating for the seed bed.
- The operator shall provide an inspector under the direction of a registered professional engineer (PE) at all times during road construction. A PE shall certify (statement with PE stamp) that the road was constructed to the required Bureau of Land Management (BLM) road standards.
- Erosion-control structures such as water bars, diversion channels, and terraces will be constructed to divert water and reduce soil erosion on the disturbed area. Road ditch turnouts shall be equipped with energy dissipaters as needed to avoid erosion. Where roads interrupt overland sheet-flow and convert this runoff to channel flow, ditch turnouts shall be designed to reconvert channel flow to sheet flow. Rock energy dissipaters and gravel dispersion fans may be used, or any other design which would accomplish the desired reconversion of flow regime. As necessary cut banks, road drainages, and road crossings shall be armored or otherwise engineered to prevent headcutting

### **Health and Safety**

- In accordance with 29 CFR 1910.1200, a Material Safety Data Sheet (MSDS) for every chemical or hazardous material brought on-site will be kept on file in Petro-Canada's field office.

- Petro-Canada will transport and/or dispose of any hazardous wastes, as defined by the Resource Conservation and Recovery Act of 1976 (RCRA), as amended, in accordance with all applicable Federal, State, and local regulations.
- All storage tanks that contain produced water, or other fluids which may constitute a hazard to public health or safety, will be surrounded by a secondary means of containment for the entire contents of the tank, plus freeboard for precipitation, or to contain 110 percent of the capacity of the tank. The appropriate containment and/or diversionary structures or equipment, including walls and floor, will be constructed so that any discharge from a primary containment system, such as a tank or pipe, will not drain, infiltrate, or otherwise escape to groundwater or surface waters before cleanup is completed. A liner shall be used when the ground is permeable and would allow filtration of fluid to the subsurface strata.
- Notice of any spill or leakage, as defined in BLM NTL 3A, will be immediately reported by Petro-Canada to the AO and to other Federal and State officials as required by law. Oral notice will be given as soon as possible, but within no more than 24 hours, and those oral notices will be confirmed in writing within 72 hours of any such occurrence.

### C. REQUIRED APPROVALS, REPORTS AND NOTIFICATIONS

Required verbal notifications are summarized in Table 1, attached.

Building Location- Notify the Price Field Office at least 48-hours prior to commencing construction of location.

Spud- Notify the Price Field Office 24-hours prior to spud. Submit written notification (Sundry Notice, Form 3160-5) to the Moab Field Office within 24-hours after spud, regardless of whether using a dry hole digger or big rig.

Daily Drilling Reports- Daily drilling reports that describe the progress and status of the well shall be submitted to the Moab Field Office on at least a weekly basis. This report may be in any format customarily used by the operator.

Oil and Gas Operations Reports (OGORs)- Production from this well shall be reported to Minerals Management Service (MMS) on a monthly basis.

Sundry Notices- Any modification to the proposed drilling program shall be submitted to the Moab Field Office on a Sundry Notice (Form 3160-5). Regulations at 43 CFR 3162.3-2 describe which operations require prior approval, and which require notification.

Drilling Suspensions- Operations authorized by this permit shall not be suspended for more than 30 days without prior approval of the Moab Field Office. All conditions of this approval shall be applicable during any operations conducted with a replacement rig.

Undesirable Events- Spills, blowouts, fires, leaks, accidents, or any other unusual occurrences shall be immediately reported to the BLM in accordance with requirements of NTL-3A.

Cultural Resources- If cultural resources are discovered during construction, immediately notify the Price Field Office, and work that might disturb the cultural resources shall cease.

First Production- A first production conference will be scheduled as soon as the productivity of the well is apparent. This conference should be coordinated through the Price Field Office.

Notify the Moab Field Office when the well is placed into production. Initial notification may be verbal, but must be confirmed in writing within five business days. Please include the date production started, the producing formation and production volumes.

Well Completion Report- Whether the well is completed as a dry hole or as a producer, a *Well Completion or Recompletion Report and Log* (Form 3160-4) shall be submitted to the Moab Field Office within thirty-days after completion of the well. Two copies of all logs, core descriptions, core analyses, well test data, geologic summaries, sample description, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, will be filed with Form 3160-4. When requested, samples (cuttings and/or samples) will be submitted to the Moab Field Office.

Venting/Flaring of Gas- Gas produced from this well may not be vented/flared beyond an initial, authorized test period of 30 days or 50 MMcf, whichever first occurs, without the prior, written approval of the Moab Field Office. Should gas be vented or flared without approval beyond the authorized test period, the well may be ordered to be shut-in until the gas can be captured or until approval to continue the venting/flaring pursuant to NTL-4A is granted. Compensation shall be due for gas that is vented/flared without approval.

Produced Water- An application for approval of a permanent disposal method and location will be submitted to the Moab Field Office for approval pursuant to Onshore Oil and Gas Order No.7.

Off-Lease Measurement, Storage, Commingling- Prior approval must be obtained from the Moab Field Office for off-lease measurement, off-lease storage and/or commingling of production prior to the sales measurement point. The term "commingling" describes both the combining of production from different geologic zones and/or combining production from different leases or agreement areas.

Plugging and Abandonment- If the well is a dry hole, plugging instructions must be obtained from the Moab Field Office prior to initiating plugging operations.

A "Subsequent Report of Abandonment" (Sundry Notice, Form 3160-5) will be filed with the Moab Field Office within thirty-days following completion of the well for abandonment. This report will indicate where plugs were placed and the current status of surface restoration. Upon completion of approved plugging, a regulation marker will be erected in accordance with 43 CFR 3162.6. Final abandonment will not be approved until the surface reclamation work required by the approved APD or approved abandonment notice has been completed to the satisfaction of the Price Field Office or the appropriate surface managing agency.

#### TABLE 1

#### NOTIFICATIONS

Notify Don Stephens (435-636-3608) or Walton Willis (435-636-3662) of the BLM Price Field Office for the following:

2 days prior to commencement of dirt work, construction and reclamation; (Stephens)

1 day prior to spud; (Willis)

50 feet prior to reaching the surface casing setting depth; (Willis)

3 hours prior to testing BOP equipment. (Willis)

If the person at the above number cannot be reached, notify the BLM Moab Field Office at 435-259-2100.

Well abandonment operations require 24-hour advance notice and prior approval. In the case of newly drilled dry holes, verbal approval can be obtained from:

Eric Jones, Petroleum Engineer

Office: 435-259-2117  
Home: 435-259-2214

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 9

**CONFIDENTIAL**

**SUNDRY NOTICES AND REPORTS ON WELLS**

Describe the type of operations to drill new wells, or to fully deepen existing wells below current bottom hole depth, venter plugs and wells, or to install horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER _____		5. LEASE DESIGNATION AND SERIAL NUMBER UTU- 077547
2. NAME OF OPERATOR: Petro-Canada Resources (USA) Inc.		6. IF INDIAN, ALLOTTEE OR TRIBE NAME N/A
3. ADDRESS OF OPERATOR 999 18th St, Suite 600 CITY Denver STATE CO ZIP 80202-2499		7. UNIT or AGREEMENT NAME undesigned
PHONE NUMBER: (303) 297-2100		8. WELL NAME and NUMBER: COTTONWOOD FED 24-31
4. LOCATION OF WELL FOOTAGE AT SURFACE: 2,007' FSL & 1,957' FWL NE/4 SW/4 QTR/QR SECTION, TOWNSHIP RANGE, MERIDIAN: NESW 24 13S 15E S		9. API NUMBER: 4300731254
		10. FIELD AND POOL, OR WILDCAT undesigned
		COUNTY Carbon
		STATE UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT (Submit Duplicate) Approximate date work will start _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDE TRACK TO NEAR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
<input type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion _____	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START-RESUME)	<input type="checkbox"/> WATER SHUT OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input checked="" type="checkbox"/> OTHER: <u>Permit Extension</u>
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

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 first extension that has been requested

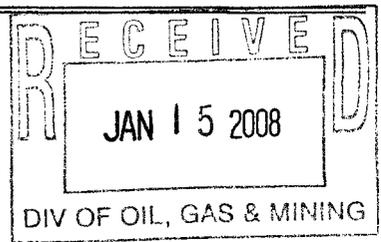
Approved by the  
Utah Division of  
Oil, Gas and Mining

Date: 01-16-08  
By: [Signature]

COPY SENT TO OPERATOR  
Date: 1-17-2008  
Initials: ES

NAME (PLEASE PRINT) Marnie Griffin TITLE Agent for Petro-Canada Resources (USA), Inc.  
SIGNATURE [Signature] DATE 1/14/2008

(This space for State use only)





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

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

**API:** 4300731254  
**Well Name:** COTTONWOOD FED 24-31 UFU-077547  
**Location:** Sec 24 13S-15E NESW 2,007' FSL & 1,957' FWL NE/  
**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

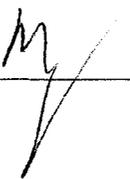
Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? Yes  No

Have there been any changes to the access route including ownership, or right-of-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  No

  
 \_\_\_\_\_  
 Signature  
 Title: Agent

1/14/2008  
 \_\_\_\_\_  
 Date

Representing: Petro-Canada Resources (USA) Inc.

**CONFIDENTIAL**

**SUNDRY NOTICES AND REPORTS ON WELLS**

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.

1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER _____		5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-077547
2. NAME OF OPERATOR: Petro-Canada Resources (USA) Inc.		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: N/A
3. ADDRESS OF OPERATOR: 999 18th St, Suite 600 CITY Denver STATE CO ZIP 80202-2499		7. UNIT or CA AGREEMENT NAME: undesignated
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2,007' FSL & 1,957' FWL, NE/4 SW/4, QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NESW 24 13S 15E S		8. WELL NAME and NUMBER: COTTONWOOD FED 24-31
PHONE NUMBER: (303) 297-2100		9. API NUMBER: 4300731254
COUNTY: Carbon		10. FIELD AND POOL, OR WLD/CAT: <del>undesignated</del> Wildcat
STATE: UTAH		

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
<input type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: _____	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input checked="" type="checkbox"/> OTHER: <u>Permit Extension</u>
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

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: 12-22-2008  
By: [Signature]

NAME (PLEASE PRINT) <u>Don Hamilton</u>	TITLE <u>Agent for Petro-Canada Resources (USA), Inc.</u>
SIGNATURE <u>Don Hamilton</u>	DATE <u>12/17/2008</u>

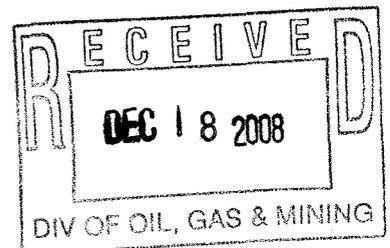
(This space for State use only)

COPY SENT TO OPERATOR

Date: 12.30.2008

Initials: KS

(See Instructions on Reverse Side)



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

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

**API:** 4300731254  
**Well Name:** COTTONWOOD FED 24-31  
**Location:** 2,007' FSL & 1,957' FWL, NESW, S. 24, 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  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 right-of-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  No

Don Hamilton  
Signature

12/17/2008  
Date

Title: Agent

Representing: Petro-Canada Resources (USA) Inc.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0137  
Expires: March 31, 2007

**SUNDRY NOTICES AND REPORTS ON WELLS**

*Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.*

**SUBMIT IN TRIPLICATE- Other instructions on reverse side.**

1. Type of Well  
 Oil Well     Gas Well     Other

2. Name of Operator **Petro-Canada Resources (USA), Inc.**

3a. Address  
**999 18th Street, Suite 600; Denver, Colorado 80202**

3b. Phone No. (include area code)  
**303-297-2100**

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
**2,007' FSL & 1,957' FWL, NE/4 SW/4, Section 24, T13S, R15E, SLB&M**

5. Lease Serial No.  
**UTU-077547**

6. If Indian, Allottee or Tribe Name  
**N/A**

7. If Unit or CA/Agreement, Name and/or No.  
**N/A**

8. Well Name and No.  
**Cottonwood Fed 24-31**

9. API Well No.  
**43-007-31254**

10. Field and Pool, or Exploratory Area  
**undesigned**

11. County or Parish, State  
**Carbon County, Utah**

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other <b>Permit Extension</b>
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

**Petro-Canada Resources (USA), Inc. hereby requests a two year extension of the federal drilling permit for the referenced well.**

The original permit being approved 06/19/07.

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**OCT 01 2009**

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**SEP 09 2009**

**BLM - Price, UT**

**DIV. OF OIL & GAS MINING**

**FILE COPY**

*Approval granted to extend APD + 11/6/19/2011 - MLH*

14. I hereby certify that the foregoing is true and correct  
 Name (Printed/Typed)

**Don Hamilton**

Title **Agent for Petro-Canada Resources (USA), Inc.**

Signature

*Don Hamilton*

Date

*September 5, 2009*

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by

*Manny Hernandez*

**Petroleum Engineer**

Date

**SEP 18 2009**

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

**PRICE FIELD OFFICE**

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

**CONDITIONS OF APPROVAL ATTACHED**

# *Green River District Reclamation Guidelines*

The Green River District Office Guidelines applies to all surface disturbing activities upon BLM administered surface lands. These activities include all actions authorized, conducted, or funded by the BLM, and that disturb the soil resources on the public lands. This policy is intended to be compatible with other BLM program objectives.

A reclamation plan shall be developed for all surface disturbing activities. The level of detail for the reclamation plan shall reflect: the complexity of the project, the environmental concerns generated during project review, and the reclamation potential for the site. These plans shall also incorporate any program or regulatory specific requirements for reclamation. The reclamation plan will address short term stabilization to facilitate long term reclamation. The reclamation plan is considered complete when all the reclamation requirements described below have been addressed, the techniques needed to meet the reclamation standards are described in detail, and the BLM concurs with the reclamation plan.

Compliance with the requirements of this document will be a Surface Use Condition of Approval (COA) and approved mitigation actions for all future BLM authorizations within the jurisdiction of the Green River District Office.

## A. RECLAMATION GOAL

1. The long term goal for reclamation is to facilitate eventual ecosystem reconstruction by returning the land to a safe, stable, and proper functioning condition.
2. The short-term reclamation goal is to immediately stabilize disturbed areas and to provide the necessary conditions to achieve the long term goal.

## B. RECLAMATION OBJECTIVES

1. Establish a desired self-perpetuating diverse plant community. The objective is to attain **75% basal cover** based on similar undisturbed adjacent native vegetative community, and comprised of desired species and/or seeded species within 5 years of initial reclamation action. However if after three (3) growing seasons there is less than **30%** of the basal cover based on similar undisturbed native vegetative community, then the Authorized Officer may require additional seeding efforts.
2. Establish slope stability and desired topographic diversity.
3. Reconstruct and stabilize altered water courses and drainage features.
4. Ensure the biological, chemical, and physical integrity of the topsoil resource during all phases of construction, operation, and reclamation. BMP's designed to minimize and prevent erosion, compaction, and contamination of the topsoil resource should be used to maintain the topsoil resource.

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5. Re-establish the visual composition and characteristics to blend with the natural surroundings.
6. Control the occurrences of noxious weeds and undesirable invasive species by utilizing principles of integrated weed management including prevention, mechanical, chemical, and biological control methods.
7. Manage all waste materials.
8. Conduct monitoring that is able to assess the attainment or failure of reclamation actions.

### C. RECLAMATION ACTIONS

*The following Reclamation Actions are intended to facilitate the achievement of the Reclamation Objectives. These actions shall be adhered to during reclamation activities.*

*Changes/alterations to the Reclamation Actions should be detailed in the submitted reclamation plan as to why the changes/alterations are necessary and approved by the Authorized Officer.*

#### **Objective 1. Establish a desired self-perpetuating plant community.**

Action 1a. Use of non native plant species is allowed, however, selected non native species should be selected that will not displace or offer long-term competition to the native plants.

Action 1b. Drill Seeding is the preferred method of seed application unless site conditions preclude the use of drill seeding equipment. Drill seeds at the rate of 45 Pure Live Seeds (PLS) per linear foot. Seeds should be drilled to a depth of .25 to .50 inches. Some plant seeds should not be drilled and if incorporated the application method should fit the seed type requirements.

Action 1c. Areas in excess of 40% slope or are excessively rocky will be broadcast seeded at 80-90 PLS and covered to a maximum of 0.25 inches by harrowing, drag bar, or roller.

Action 1d. Seeding efforts must be conducted between August 15 and prior to winter freezing of the soil.

Action 1e. All seed utilized will be tested prior to application to ensure BLM specifications for PLS, purity, noxious weeds, etc. have been met. Seed tags will be provided to the Authorized Officer prior to initiation of seeding activities.

Action 1f. As determined in cooperation with the Authorized Officer, fencing may be required to exclude livestock/big game grazing until seeded species have become established. Fencing would be constructed to BLM standards.

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Action 1g. As determined in cooperation with the Authorized Officer mulching may be required. Mulch should be applied within 24 hours following completion of seeding. Mulching should consist of crimping certified weed-free straw or certified weed-free native grass hay into the soil. Hydro-mulching may be used in areas where crimping is impracticable, in areas of interim reclamation that were hydro-seeded, and in areas of temporary seeding regardless of seeding method.

**Objective 2. Ensure slope stability and topographic diversity**

Action 2a. Reconstruct the landscape to approximate the original contour and topographic diversity.

Action 2b. Identify necessary erosion controls designed to prevent sediment transport from the reclaimed areas.

**Objective 3. Reconstruct and stabilize altered water courses and drainage features.**

Action 3a. Reconstruct drainage basins to have similar features found in nearby properly functioning basins, including: basin relief ratios, valley gradients, sinuosity, and drainage densities for all reclaimed basins.

Action 3b. Reconstruct drainages to have similar hydraulic characteristics found in properly functioning drainages, including: flow depth, water surface top width, cross-section area of flow, water surface slope, mean channel velocity, desired vegetation, and channel roughness.

**Objective 4. Ensure the biological, chemical, and physical integrity of the topsoil resource during all phases of construction, operation, and reclamation. BMP's designed to minimize and prevent erosion, compaction, and contamination of the topsoil resource should be used to maintain the topsoil resource.**

Action 4a. Segregate topsoil from subsoil without mixing them, based on site specific conditions.

Action 4b. Where possible, integrate stored topsoil into existing production landscape.

Action 4c. Stabilize all stored topsoil from erosion, and seed topsoil stored beyond one growing season with an approved seed mixture.

Action 4d. Identify topsoil storage with appropriate signage, to prevent improper use of the stored topsoil.

Action 4e. Redistribute the topsoil to pre-disturbance depth.

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Action 4f. Reduce soil/subsoil compaction to the anticipated root depth of the desired plant species. Compaction relief typically should be designed for 18-24 inches in depth. Compaction relief should be designed to create a cross hatch pattern, and distance between furrows should not be greater than 2 feet.

Action 4g. If the topsoil to be re spread is greater than 6" in depth, then topsoil should be applied and then compaction relief implemented. If the topsoil to be re spread is less than 6" , then compaction relief should be implemented prior to top soil application. Avoid leaving large clumps/clods, if this exists, discing may be necessary.

**Objective 5. Re-establish the visual composition and characteristics to blend with the natural surroundings.**

Action 5a. Ensure the overall location, landform, scale, shape, color, and orientation of major landscape features blends into the adjacent area and meets the needs of the planned post disturbance land use.

**Objective 6. Control the occurrences of noxious weeds and undesirable invasive species by utilizing principles of integrated weed management including prevention, mechanical, chemical, and biological control methods.**

Action 6a. Inventory and document noxious and invasive plant infestations before reclamation actions begin.

Action 6b. Control and manage Invasive and Noxious weed infestations using principles of integrated weed management including chemical, mechanical, and biological control methods. An approved Pesticide Use Proposal (PUP) is required for all planned herbicide applications. Herbicides must be applied by a certified applicator with a current Utah Pesticide Applicators License. A Biological Use Proposal is required for new biocontrol agents in the Field Office area.

**Objective 7. Manage all waste materials.**

Action 7a. Segregate all waste materials from the subsoil and topsoil.

Action 7b. All waste materials transported and disposed of off-site, must be placed in an authorized disposal facility in accordance with all local, State and Federal requirements.

**Objective 8. Conduct monitoring that is able to assess the attainment or failure of reclamation actions.**

Action 8a. Monitoring methodology should be an approved BLM method designed to monitor basal vegetative cover.

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Action 8b. In cooperation with the Authorized Officer, an undisturbed reference site should be selected prior to monitoring. One reference site may be used for multiple reclamation sites as long the site potentials are similar.

Action 8c. Evaluate monitoring data for compliance with the reclamation plan objectives

Action 8d. Document and report monitoring data and recommend revised reclamation strategies, if necessary. Each applicant will submit an annual reclamation report to the Authorized Officer by March 31<sup>st</sup>. The report will document compliance with all aspects of the reclamation objectives and standards.

Action 8e. Implement revised reclamation strategies as needed.

Action 8f. Repeat the process of monitoring, evaluating, documenting/reporting, and implementing, until reclamation goals are achieved, as determined by the Authorized Officer.

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## GLOSSARY

**Surface Disturbing Activities** – An action that alters the mineral soil resource, and/or surface geologic features, beyond natural site conditions and on a scale that affects other Public Land values. Examples of surface disturbing activities may include: operation of heavy equipment to construct well pads, roads, pits and reservoirs; installation of pipelines and power lines; and the conduct of several types of vegetation treatments. Surface disturbing activities may be either authorized or prohibited.

**Federal Action** - Approval of specific projects, such as construction or management activities located in a defined geographic area. Projects include actions approved by permit or other regulatory decision as well as federal and federally assisted activities.

*National Environmental Policy Act (NEPA) [42 U.S.C. 4321 et seq.]*

**Invasive Species** - A species that is not native (or is alien) to the ecosystem under consideration and whose introduction causes or is likely to cause economic or environmental harm or harm to human health.

*Executive Order 13112*

**Reclamation Plan** – A written document that addresses the reconstruction of disturbed ecosystems by returning the land to a condition approximate or equal to that which existed prior to disturbance, or to a stable and productive condition compatible with the land use plan.

**Waste materials** – Any material that can interfere with successful reclamation, safety, and long term stability of a site (contaminated soil or water, drilling muds, solid waste).

*Adapted from various sources*

**Contamination** - The presence of man-made chemicals or other alterations in the natural soil or water environment (pesticides, hazardous substances, petroleum, salts).

*Adapted from various sources*

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DIV. OF OIL, GAS & MINING

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	<b>FORM 9</b>  <b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU-077547
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  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.	<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>  <b>7. UNIT or CA AGREEMENT NAME:</b>
<b>1. TYPE OF WELL</b> Gas Well	<b>8. WELL NAME and NUMBER:</b> COTTONWOOD FED 24-31
<b>2. NAME OF OPERATOR:</b> PETRO-CANADA RESOURCES (USA), INC	<b>9. API NUMBER:</b> 43007312540000
<b>3. ADDRESS OF OPERATOR:</b> 999 18th Street, Sutie 600 , Denver, CO, 80202	<b>PHONE NUMBER:</b> 303 297-2100 Ext
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 2007 FSL 1957 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NESW Section: 24 Township: 13.0S Range: 15.0E Meridian: S	<b>9. FIELD and POOL or WILDCAT:</b> WILDCAT  <b>COUNTY:</b> CARBON  <b>STATE:</b> UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start: 9/1/2010	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input checked="" type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> 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**

Date: December 14, 2009

By: 

<b>NAME (PLEASE PRINT)</b> Don Hamilton	<b>PHONE NUMBER</b> 435 719-2018	<b>TITLE</b> Permitting Agent (Buys & Associates, Inc)
<b>SIGNATURE</b> 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 43007312540000**

**API:** 43007312540000

**Well Name:** COTTONWOOD FED 24-31

**Location:** 2007 FSL 1957 FWL QTR NESW SEC 24 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  No

**Approved by the Utah Division of Oil, Gas and Mining**

**Signature:** Don Hamilton

**Date:** 12/4/2009

**Title:** Permitting Agent (Buys & Associates, Inc)

**Representing:** PETRO-CANADA RESOURCES (USA), INC

**Date:** December 14, 2009  
**By:**



GARY R. HERBERT  
Governor

GREGORY S. BELL  
Lieutenant Governor

# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
Executive Director

### 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: APD Rescinded – Cottonwood Fed 24-31, Sec. 24, T. 13S, R. 15E  
Carbon County, Utah API No. 43-007-31254

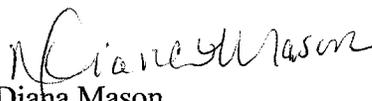
Ladies and Gentlemen:

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 prior 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,

  
Diana Mason  
Environmental Scientist

cc: Well File  
Bureau of Land Management, Price