

August 31, 2007

**RECEIVED**

**SEP 04 2007**

**DIV. OF OIL, GAS & MINING**

Mrs. Diana Mason  
State of Utah  
Division of Oil Gas and Mining  
P.O. Box 145801  
Salt Lake City, Utah 84114-5801

RE: Application for Permit to Drill - Petro-Canada Resources (USA), Inc.  
**State #32-11- 660' FNL 660' FEL, NE/4 NE/4,**  
Section 32, T22S, R15E, SLB&M, Emery County, Utah

Dear Mrs. Mason:

On behalf of Petro-Canada Resources (USA), Inc. (Petro-Canada), Buys & Associates, Inc. respectfully submits the enclosed original and one copy of the Application for Permit to Drill (APD) for the above referenced SITLA surface and SITLA 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 corridor;

Exhibit "C" - Drilling Plan;

Exhibit "D" - Surface Use Plan;

Exhibit "E" - 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 303-297-2100 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  
Ed Bonner, SITLA  
Bart Kettle, Division of Oil, Gas and Mining

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

FORM 3

AMENDED REPORT   
(highlight changes)

<b>APPLICATION FOR PERMIT TO DRILL</b>		5. MINERAL LEASE NO: ML-50651	8. SURFACE: State
1A. TYPE OF WORK: DRILL <input checked="" type="checkbox"/> REENTER <input type="checkbox"/> DEEPEN <input type="checkbox"/>		7. IF INDIAN, ALLOTTEE OR TRIBE NAME: N/A	
B. TYPE OF WELL: OIL <input type="checkbox"/> GAS <input checked="" type="checkbox"/> OTHER _____ SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input checked="" type="checkbox"/>		8. UNIT or CA AGREEMENT NAME: N/A	
2. NAME OF OPERATOR: Petro-Canada Resources (USA), Inc.		9. WELL NAME and NUMBER: State 32-11	
3. ADDRESS OF OPERATOR: 1099-18th St, Suite 400 CITY Denver STATE CO ZIP 80202		PHONE NUMBER: (303) 297-2100	10. FIELD AND POOL, OR WILDCAT: undesignated
4. LOCATION OF WELL (FOOTAGES) AT SURFACE: 660' FNL 660' FEL, 5619774 38.859908 AT PROPOSED PRODUCING ZONE: 43012654 -116.285694		11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NENE 32 22S 15E S	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE: 11.55 miles southwest of Green River, Utah		12. COUNTY: Emery	13. STATE: UTAH
15. DISTANCE TO NEAREST PROPERTY OR LEASE LINE (FEET) 660'	16. NUMBER OF ACRES IN LEASE: 640	17. NUMBER OF ACRES ASSIGNED TO THIS WELL: 40	
18. DISTANCE TO NEAREST WELL (DRILLING, COMPLETED, OR APPLIED FOR) ON THIS LEASE (FEET) 4,000'	19. PROPOSED DEPTH: 7588' 7,762'	20. BOND DESCRIPTION: Fidelity Bond # 4127699	
21. ELEVATIONS (SHOW WHETHER DF, RT, GR, ETC.): 4,470' GR	22. APPROXIMATE DATE WORK WILL START: 10/1/2007	23. ESTIMATED DURATION: 30 days drilling, 40 days comp.	

**PROPOSED CASING AND CEMENTING PROGRAM**

SIZE OF HOLE	CASING SIZE, GRADE, AND WEIGHT PER FOOT	SETTING DEPTH	CEMENT TYPE, QUANTITY, YIELD, AND SLURRY WEIGHT
14-3/4"	10-3/4" N-80 ST 45.5#	4,500	see Drilling Plan
9-7/8"	7" P-110 LT 32#	7,762	see Drilling Plan
		7588'	DES

**ATTACHMENTS**

VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES:

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER | <input checked="" type="checkbox"/> COMPLETE DRILLING PLAN                                   |
| <input type="checkbox"/> EVIDENCE OF DIVISION OF WATER RIGHTS APPROVAL FOR USE OF WATER        | <input type="checkbox"/> FORM 5, IF OPERATOR IS PERSON OR COMPANY OTHER THAN THE LEASE OWNER |

NAME (PLEASE PRINT) Don Hamilton TITLE Agent for Petro-Canada Resources (USA), Inc.  
SIGNATURE Don Hamilton DATE 8/31/2007

(This space for State use only)

ARI NUMBER ASSIGNED: 43015-30734

Approved by the  
Utah Division of  
Oil, Gas and Mining  
APPROVAL:

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SEP 04 2007

DIV. OF OIL, GAS & MINING

(11/2001)

Date: 12-24-07  
By: [Signature]

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# T22S, R15E, S.L.B.&M.

Petro-Canada (USA), Inc.

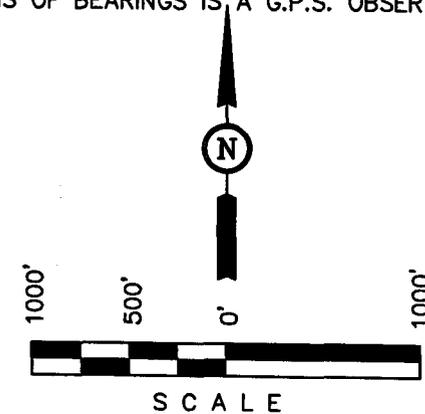
Well location, STATE #32-11, located as shown in the NE 1/4 NE 1/4 of Section 32, T22S, R15E, S.L.B.&M., Emery County, Utah.

## BASIS OF ELEVATION

SPOT ELEVATION LOCATED AT ROAD INTERSECTION, IN THE NW 1/4 NE 1/4 OF SECTION 1, T23S, R15E, S.L.B.&M. TAKEN FROM THE HORSE BENCH EAST, EMERY 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 4244 FEET.

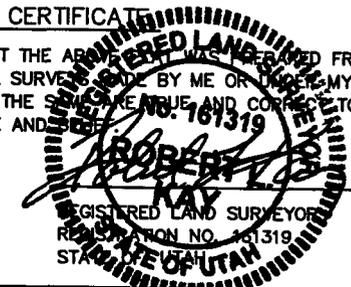
## BASIS OF BEARINGS

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



## CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEY MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

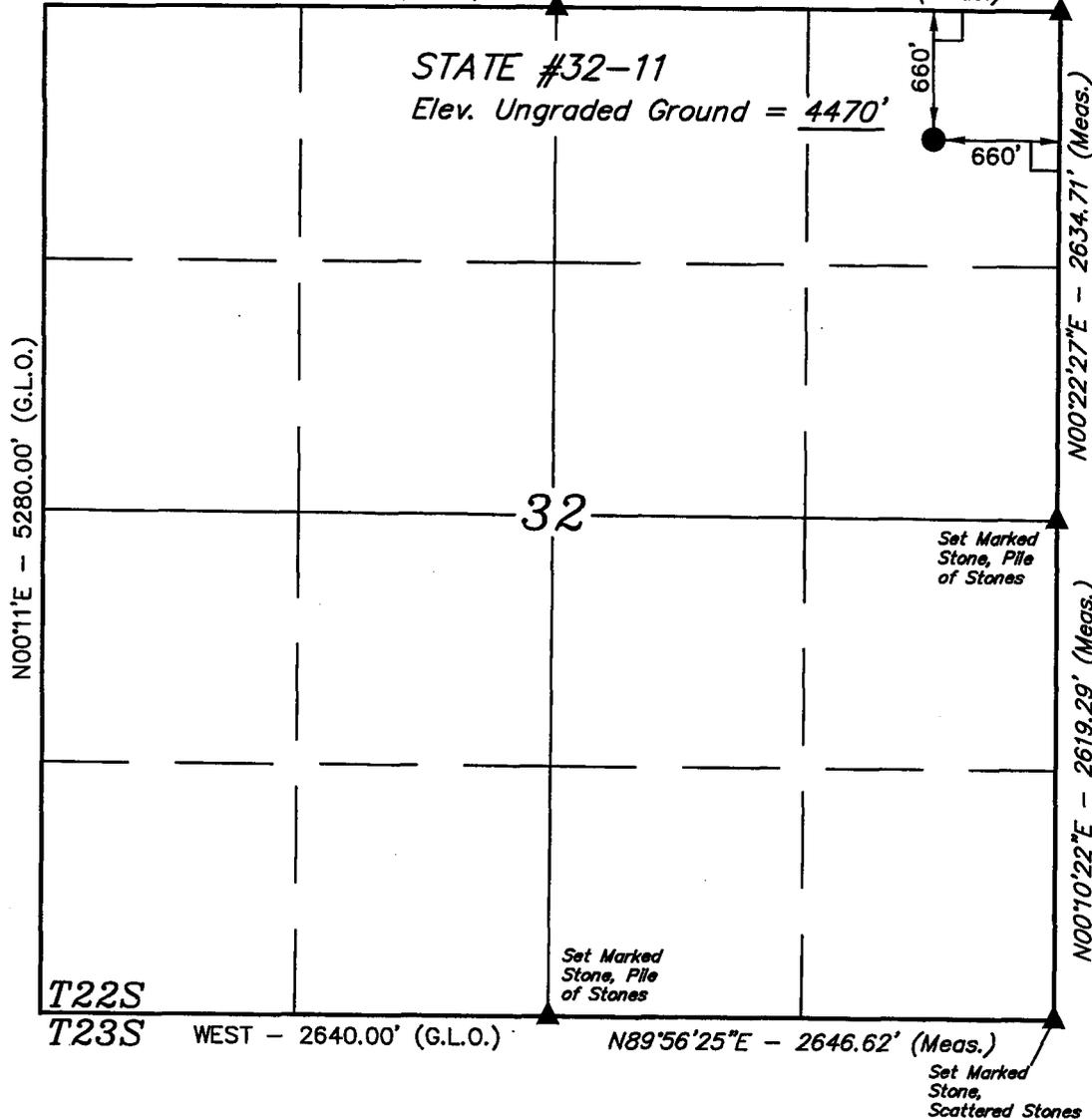


**UINTAH ENGINEERING & LAND SURVEYING**  
 85 SOUTH 200 EAST - VERNAL, UTAH 84078  
 (435) 789-1017

SCALE 1" = 1000'	DATE SURVEYED: 07-30-07	DATE DRAWN: 08-01-07
PARTY A.F. Z.W. C.H.	REFERENCES G.L.O. PLAT	
WEATHER HOT	FILE Petro-Canada (USA), Inc.	

S89°57'W - 2638.02' (G.L.O.) *Set Marked Stone, Pile of Stones* N89°56'39"W - 2637.71' (Meas.) *Set Marked Stone, Pile of Stones*

STATE #32-11  
 Elev. Ungraded Ground = 4470'



## LEGEND:

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

(AUTONOMOUS NAD 83)  
 LATITUDE = 38°51'35.55" (38.859875)  
 LONGITUDE = 110°17'10.52" (110.286256)  
 (AUTONOMOUS NAD 27)  
 LATITUDE = 38°51'35.64" (38.859900)  
 LONGITUDE = 110°17'08.01" (110.285558)

## DRILLING PLAN

### Attachment for Permit to Drill

**Name of Operator:** Petro-Canada Resources (USA)  
**Address:** Suite 400  
 1099-18 St  
 Denver, Colorado 80202  
**Well Location:** State 32-11  
 660' FNL & 660' FEL, NE/4 NE/4  
 Section 32, T22S, R15E  
 Emery County, UT

1. GEOLOGIC SURFACE FORMATION Cedar Mtn.

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

Formation	*	MD	Subsea
Spud in Cedar Mtn.			0
Entrada	W		
Carmel		1,229'	3259
Navajo	W	1,441'	3047
Kayenta	W	1,899'	2589
Wingate	W	2,158'	2330
Chinle		2,467'	2021
Shinarump		2,746'	1742
Moenkopi		2,806'	1682
Sinbad	W	3,298'	1190
White Rim	W	3,482'	1006
Organ Rock		3,971'	517
Honaker Trail		4,193'	295
Paradox		5,038'	(550)'
Top Paradox Salt	OG	6,288'	(1,800)'
Base Paradox Salt	OG	7,200'	(2,712)'
Leadville		7,588'	(3,100)'
Top of Mississippian Porosity	g	7,638'	(3,150)'
Base of Mississippian Porosity		7,722'	(3,234)'
<b>Total Depth</b>		<b>7,762'</b>	<b>(3,274)'</b>

*Per Greg Olson  
STD @ top of  
miss  
(7588')*

\* G = Gas, O = Oil, W = Water; Capitals = Primary, Small Case = Secondary Targets

Surface elevation – 4,470 feet ASL

4. PROPOSED CASING PROGRAM

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

Type	Size	Weight	Grade	Conn.	Top	Bottom	Hole
Conductor	20"		Conductor	Welded	0'	60'	28"
Surface	10.75"	45.5 ppf	N-80	STC	0'	4,500'	14.75"
Production	7"	32.0 ppf	P-110	LTC	0'	7,762'	9.875"

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**DRILLING PLAN**

**APPROVAL OF OPERATIONS**

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>WI</u>	<u>Remarks</u>
0' – 4,500'	N/A	N/A	N/A	Air / Air -mist
4,500' – 6,288'	+/- 9.0	+/- 34	+/- 15	LSND
6,288'-TD	+/- 12.0	+/- 40	+/- 12	Salt Mud

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 feet from wellhead.
- The blooie line discharge will be a minimum of 100 feet 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	DLL-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 temperatures are anticipated. Slight over-pressure is anticipated within the Paradox Salt
- Based on offset well information, bottom Hole Pressure is expected at 5491 psi – 12.5 lb/gal. Barite will be on location to enable higher mud weights if needed.
- The formations to be penetrated do not contain known H<sub>2</sub>S gas.

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**DRILLING PLAN**

**APPROVAL OF OPERATIONS**

**11. WATER SUPPLY**

- The water supply for construction, drilling and operations will be provided by T77208 under water right number 91-5140 which will be diverted from the Green River at the Sillman diversion by water truck through a direct water purchase.
- 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.
- Should additional water sources be pursued they will be properly permitted through the State of Utah – Division of Water Rights.

**12. CEMENT SYSTEMS**

- Surface Casing:      Lead: 1510 sacks Rockies LT + 0.125lbm/sack Poly-E-Flake + 0.25 lbm/sack Kwik Seal + 17.83 gal/sack Fresh Water  
                                    Weight: 11.5 ppg  
                                    Yield: 2.94 cu.ft./sack  
                                    Interval 4,000 feet to surface.  
                                    Tail: 310 sacks Rockies LT + 0.125lbm/sack Poly-E-Flake + 0.25 lbm/sack Kwik Seal; + 9.33 gal/sack Fresh Water  
                                    Weight: 13.5 ppg  
                                    Yield: 1.80 cu.ft./sack  
                                    Interval 4,500' to 4,000'  
                                    Cement will be circulated to surface with 100% excess over gauge volume
  
- Production Casing: 580 sacks Premium foamed Cement + 0.6% Halad R-413 + 0.2% Halad 766 + 1.5% Zonesealant 2000 foamer + 8 pps HiDense #4  
                                    Weight: 13.5 ppg (foamed wt in place)  
                                    Yield: 1.17 cu.ft./sack (un-foamed yield – liquids only)  
                                    Top of cement – 5,500'  
                                    Volume will be log caliper +10% (volumes shown are for 25% over hole size)

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

Starting Date:           October 1, 2007  
Duration:                30 days, drilling and 40 days completion

## **SURFACE USE PLAN**

### Attachment for Permit to Drill

**Name of Operator:** Petro-Canada Resources (USA)  
**Address:** Suite 400  
1099-18 St  
Denver, Colorado 80202  
**Well Location:** State 32-11  
660' FNL & 660' FEL, NE/4 NE/4  
Section 32, T22S, R15E  
Emery County, UT

The dirt contractor will be provided with an approved copy of this document prior to initiating construction. The well site is located on SITLA surface and SITLA mineral. An off-lease federal right-of-way is necessary for the new segment of road on federal surface. A State permit, a federal right-of-way grant and an Emery County Road encroachment must be in place prior to initiating any construction activities.

### **1. Existing Roads**

- a. Proposed access road will utilize a 2.5 mile segment of the existing pavement surfaced Old Hanksville Highway currently under Emery County maintenance from SR 24 to the Nine-mile Reservoir Emery County Class B Road (See Exhibit "B").
- b. From the pavement surfaced Old Hanksville Highway the existing native surfaced Nine-mile Reservoir Class B road under Emery County maintenance will be utilized for approximately 5.4 miles.
- c. The native surfaced road will not be widened beyond the existing disturbed width and will not be improved beyond routine blading of the travel surface. Any necessary upgrades to the road will be completed to Emery County Road specifications. An encroachment permit from Emery County will be secured prior to utilizing the road and constructing the proposed encroachment.
- d. We do not plan to change, alter or improve upon any other existing state or county roads.
- e. All existing roads will be maintained and kept in good repair during all phases of operation.
- f. Vehicle operators will obey posted speed restrictions and observe safe speeds commensurate with road and weather conditions.

## **2. Planned Access Roads**

- a. From the existing native surfaced Nine Mile Reservoir road an access is proposed trending west approximately 0.4 miles to the proposed well site. The access consists of entirely new disturbance and crosses no significant drainages.
- b. A road design plan is not anticipated at this time.
- c. The proposed access road will consist of a 24' travel surface within a 30' disturbed area across BLM and SITLA administered surface.
- d. SITLA approval to construct and utilize the proposed access road is requested with this application.
- e. A federal right-of-way will be required for the off-lease federal portion of the planned new access road and was applied for on July 27, 2007.
- f. A maximum grade of 10% will be maintained throughout the project with no major cuts and fills anticipated.
- g. No turnouts are proposed since the access road is only 0.4 miles long and adequate site distance exists in all directions.
- h. No low water crossings and one 18" culvert is anticipated. Adequate drainage structures will be incorporated into the remainder of the road.
- i. No surfacing material will come from federal or State 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. The operator will be responsible for all maintenance of the access road including drainage structures.

## **3. Location of Existing Wells**

- a. See Exhibit "B". There are no proposed and no existing wells within a one mile radius of the proposed location.

#### **4. Location of Existing and/or Proposed Facilities**

- a. If the well is deemed productive a sundry notice reflecting the production site layout will be submitted for approval.
- b. Rehabilitation of all pad areas not used for production facilities will be made in accordance with SITLA stipulations.

#### **5. Location and Type of Water Supply**

- a. The location and type of water supply has been addressed as #11 within Exhibit "D". (Drilling Plan).

#### **6. Source of Construction Materials**

- a. Any necessary construction materials needed will be obtained locally from a private source and hauled to the location on existing roads.

#### **7. Methods for handling waste disposal**

- a. A small reserve pit will be constructed with a minimum of one-half the total depth below the original ground surface on the lowest point within the pit. The pit will be lined with a synthetic liner. Three sides of the reserve pit will be fenced within 24 hours after completion of construction and the fourth side within 24 hours after drilling operations cease with four strands of barbed wire, or woven wire topped with barbed wire to a height of not less than four feet. The fence will be kept in good repair while the pit is drying.
- b. Following drilling, the liquid waste will be evaporated from the pit and the pit backfilled and returned to natural grade. No liquid hydrocarbons will be discharged to the reserve pit or location.
- c. In the event fluids are produced, any oil will be retained in tanks until sold and any water produced will be retained until its quality can be determined. The quality and quantity of the water will determine the method of disposal.
- d. Trash will be contained in a portable metal container and will be hauled from location periodically and disposed of at an approved disposal site. Chemical toilets will be placed on location and sewage will be disposed of at an appropriate disposal site.

## **8. Ancillary Facilities**

- a. We anticipate no need for ancillary facilities with the exception of trailers to be located on the drill site.

## **9. Well-site Layout**

- a. Available topsoil will be removed from the location and stockpiled. The location of the rig, reserve and blooie pits, and drilling support equipment will be located as shown on Exhibit "A", Figure 1 (Location Layout).
- b. A blooie pit will be located 100' from the drill hole. A line will be placed on the surface from the center hole to the blooie pit. The blooie pit will not be lined, but will be fenced on four sides to protect livestock/wildlife.
- c. Access to the well pad will be as shown on the location layout.
- d. Natural runoff will be diverted around the well pad as shown on the location layout.

## **10. Plans for Restoration of Surface**

- a. All surface areas not required for producing operations will be graded to as near original condition as possible and contoured to maintain possible erosion to a minimum.
- b. Available topsoil will be stockpiled and will be evenly distributed over the disturbed areas and the area will be reseeded as prescribed by the SITLA.
- c. Pits and any other area that would present a hazard to wildlife or livestock will be fenced off when the rig is released and removed.
- d. Any oil accumulation on the pit will be removed or overhead flagged as dictated by then existing conditions.
- e. Rehabilitation will commence following completion of the well. Holes will be filled immediately upon release of the drilling rig from the location. If the well-site is to be abandoned, all disturbed areas will be re-contoured to the natural contour as is possible.

## **11. Surface Ownership**

- a. Surface Ownership – State of Utah – under the management of the SITLA - State Office, 675 East 500 South, Suite 500, Salt Lake, City, Utah 84102-2818; 801-538-5100.
- b. Mineral Ownership – State of Utah – under the management of the SITLA - State Office, 675 East 500 South, Suite 500, Salt Lake, City, Utah 84102-2818; 801-538-5100.
- c. The operator shall contact the surface representative and the Division of Oil, Gas and Mining 48 hours prior to beginning construction activities.

## **12. Other Information:**

- a. The primary surface use is wildlife habitat and grazing. The nearest dwelling is near Green River approximately 11 miles northeast of the proposed location. The nearest live water is Nine Mile Reservoir 2.46 miles northeast.
- b. If there is snow on the ground when construction begins, it will be removed before the soil is disturbed, and piled downhill from the topsoil stockpile location.
- c. The back-slope and fore-slope will be constructed no steeper than 3:1.
- d. All equipment and vehicles will be confined to the access road and well pad.
- e. A complete copy of the approved Application for Permit to Drill (APD) including conditions and stipulations and the surface use agreement shall be on the well-site during construction and drilling operations.
- f. There will be no deviation from the proposed drilling and/or workover program without prior approval from the Division of Oil, Gas & Mining.

13. **Company Representative**

Alan Vrooman  
Petro-Canada Resources (USA), Inc.  
1099 18th Street, Suite 400, Denver, Colorado 80202  
(303) 297-2100

**Company Agent**

Don Hamilton  
Buys & Associates, Inc  
2580 Creekview Road; Moab, Utah 84532  
435-718-2018

14. **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 presently exist; that the statements made in this plan 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 subcontractors in conformity with this plan and the terms and conditions under which it is approved.

8-31-07  
Date

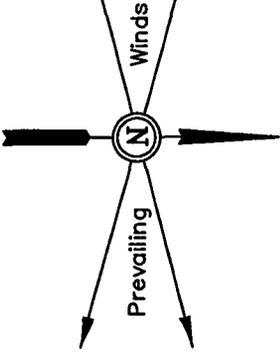
Don Hamilton  
Don Hamilton  
Agent for Petro-Canada Resources (USA) Inc.

PETRO-CANADA (USA), INC.

FIGURE #1

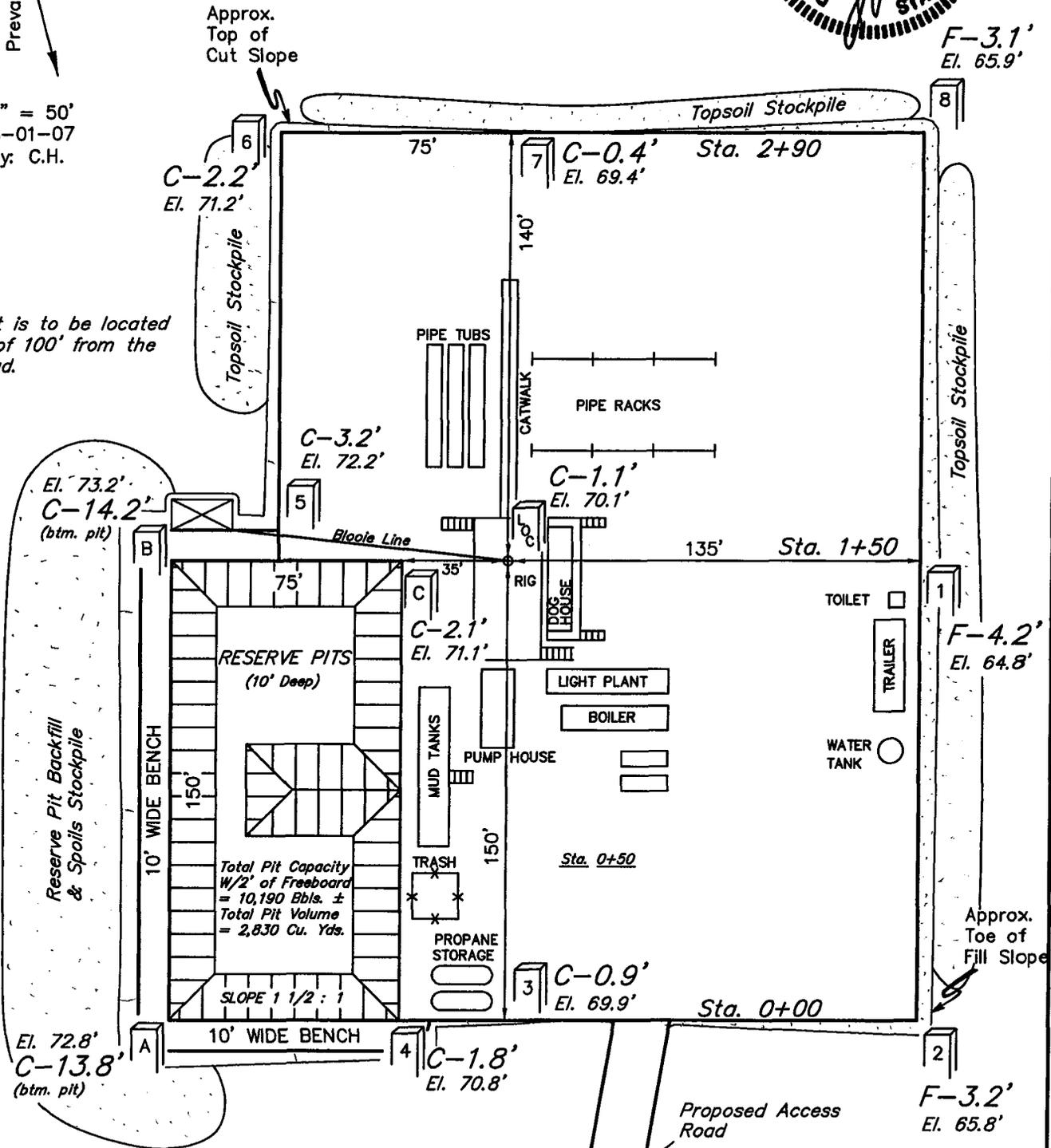
LOCATION LAYOUT FOR

STATE #32-11  
SECTION 32, T22S, R15E, S.L.B.&M.  
660' FNL 660' FEL



SCALE: 1" = 50'  
DATE: 08-01-07  
Drawn By: C.H.

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



**NOTES:**

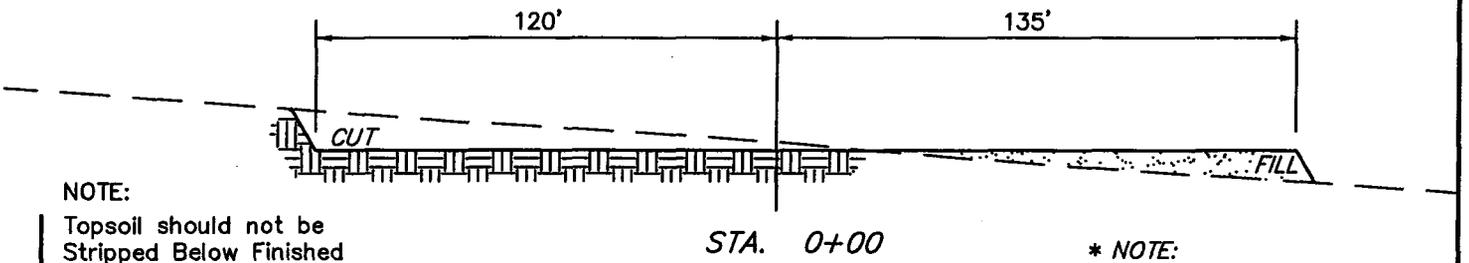
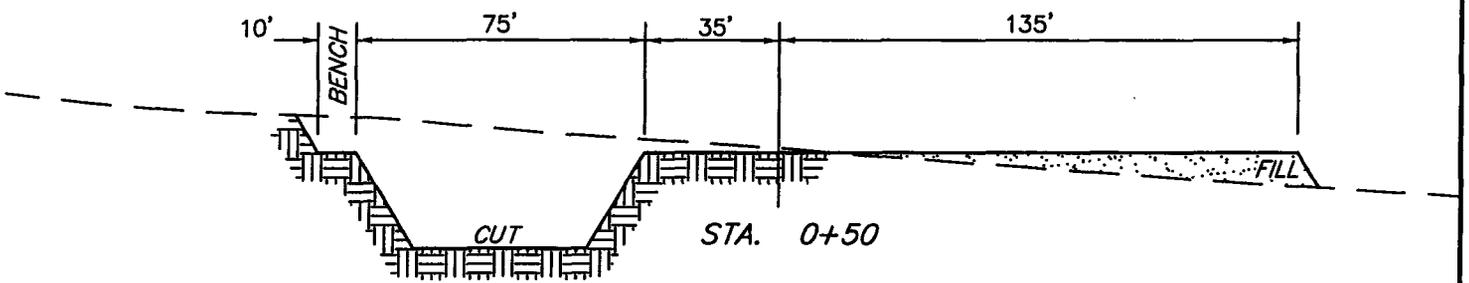
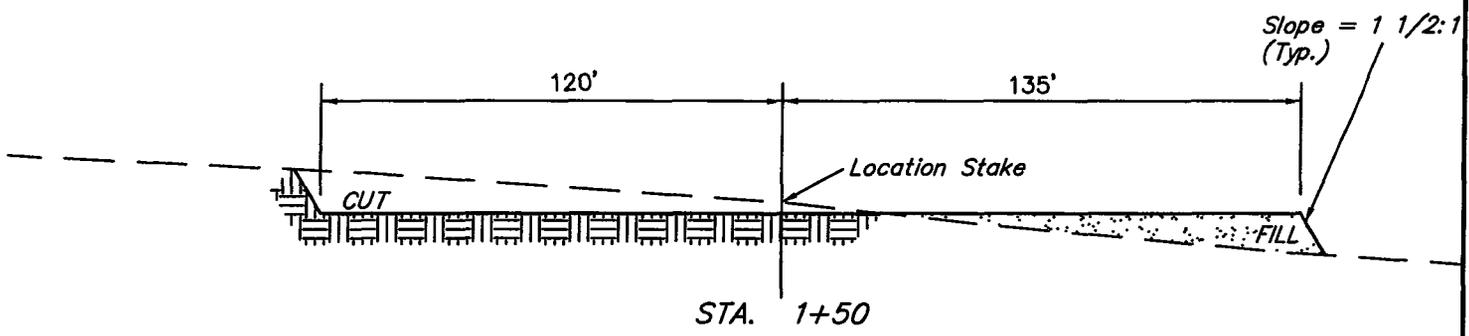
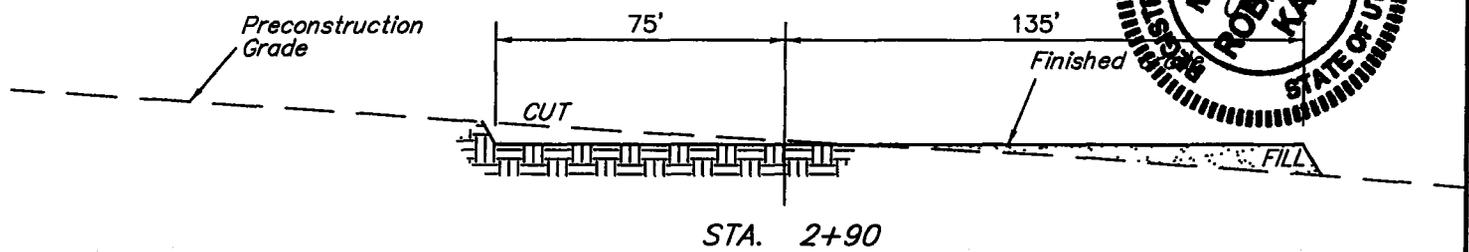
Elev. Ungraded Ground At Loc. Stake = 4470.1'  
FINISHED GRADE ELEV. AT LOC. STAKE = 4469.0'

PETRO-CANADA (USA), INC.

FIGURE #2

TYPICAL CROSS SECTIONS FOR  
STATE #32-11  
SECTION 32, T22S, R15E, S.L.B.&M.  
660' FNL 660' FEL

X-Section Scale  
1" = 50'  
DATE: 08-01-07  
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	= 1,410 Cu. Yds.
Remaining Location	= 4,690 Cu. Yds.
<b>TOTAL CUT</b>	<b>= 6,100 CU.YDS.</b>
<b>FILL</b>	<b>= 3,270 CU.YDS.</b>

EXCESS MATERIAL	= 2,830 Cu. Yds.
Topsoil & Pit Backfill (1/2 Pit Vol.)	= 2,830 Cu. Yds.
EXCESS UNBALANCE (After Interim Rehabilitation)	= 0 Cu. Yds.

# Petro-Canada (USA), Inc.

## STATE #32-11

LOCATED IN EMERY COUNTY, UTAH

SECTION 32, T22S, R15E, S.L.B.&M.

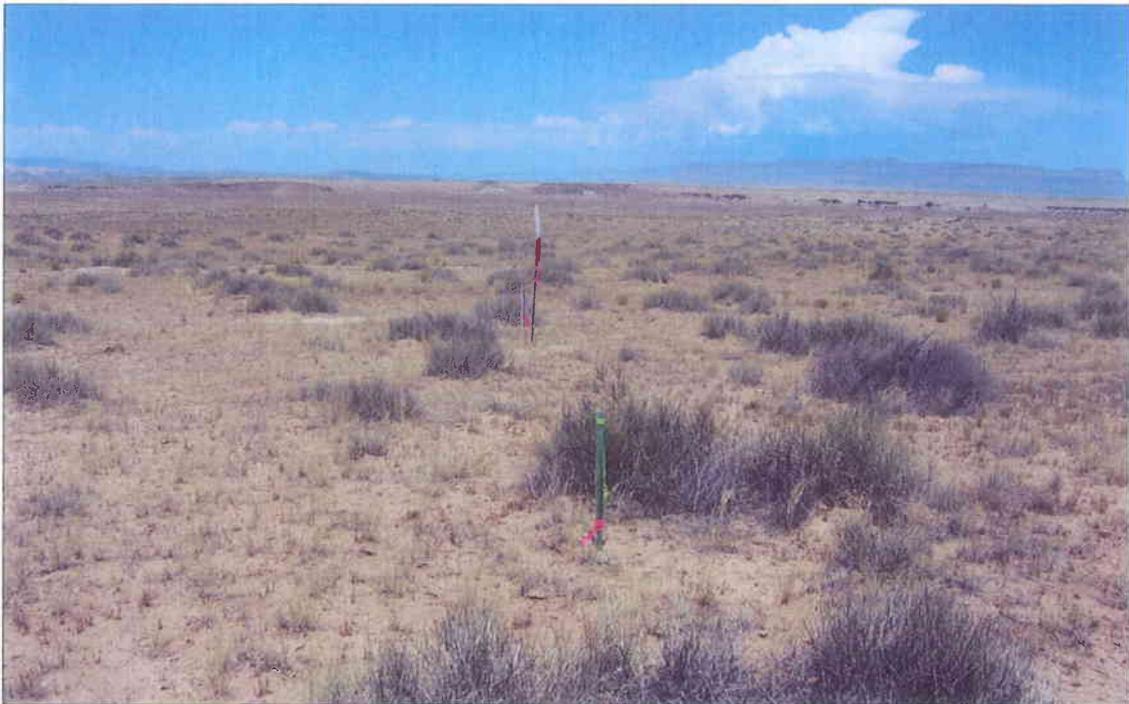


PHOTO: VIEW OF LOCATION STAKE

CAMERA ANGLE: NORTHERLY



PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS

CAMERA ANGLE: NORTHWESTERLY

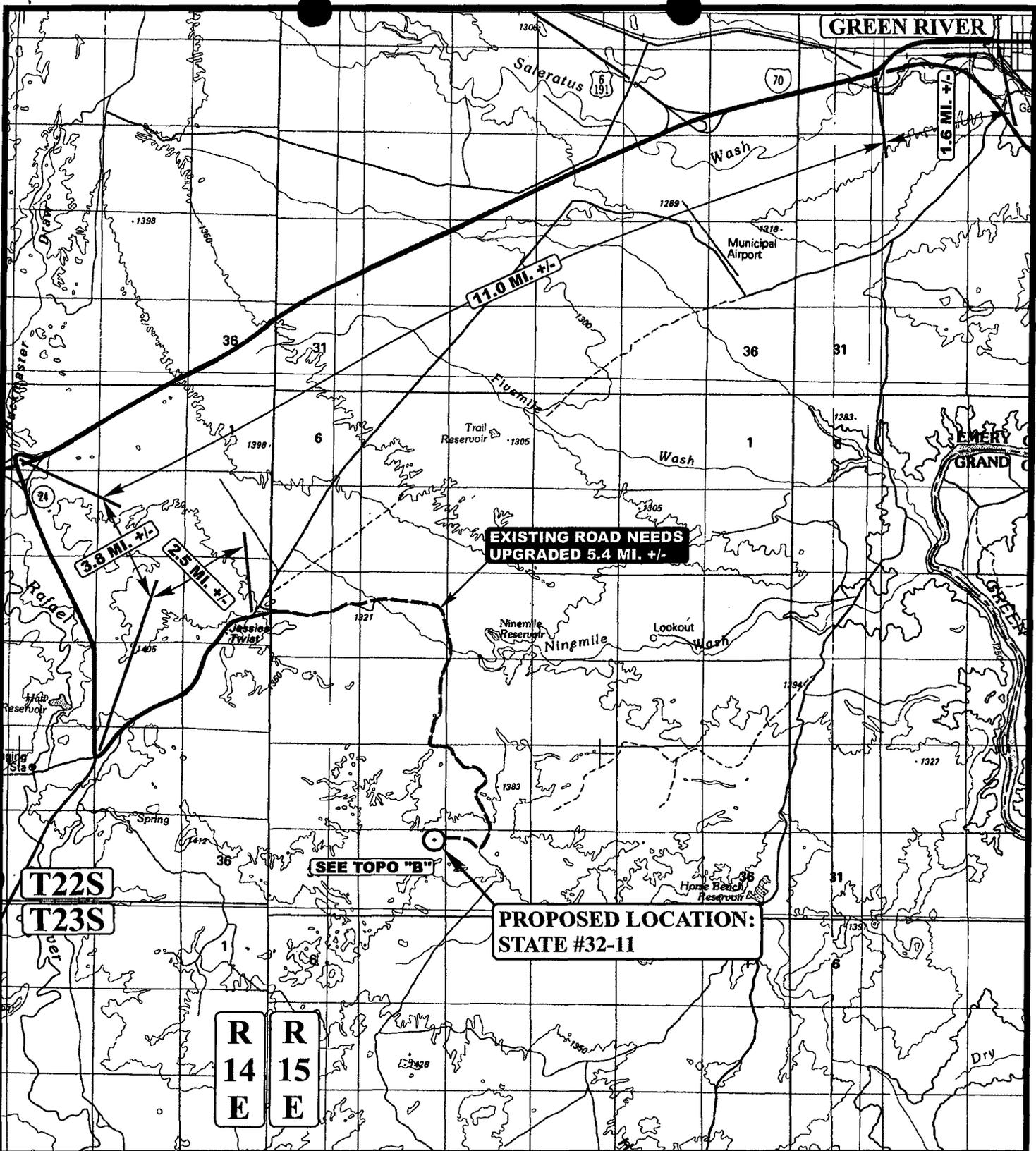


- Since 1964 -

**UELS** Uintah Engineering & Land Surveying

85 South 200 East Vernal, Utah 84078  
435-789-1017 uels@uelsinc.com

<b>TOPOGRAPHIC</b>	<b>08</b>	<b>03</b>	<b>07</b>	<b>PHOTO</b>
<b>MAP</b>	MONTH	DAY	YEAR	
TAKEN BY: A.E.	DRAWN BY: C.P.		REVISED: 00-00-00	



**EXISTING ROAD NEEDS  
UPGRADED 5.4 MI. +/-**

**PROPOSED LOCATION:  
STATE #32-11**

**SEE TOPO "B"**

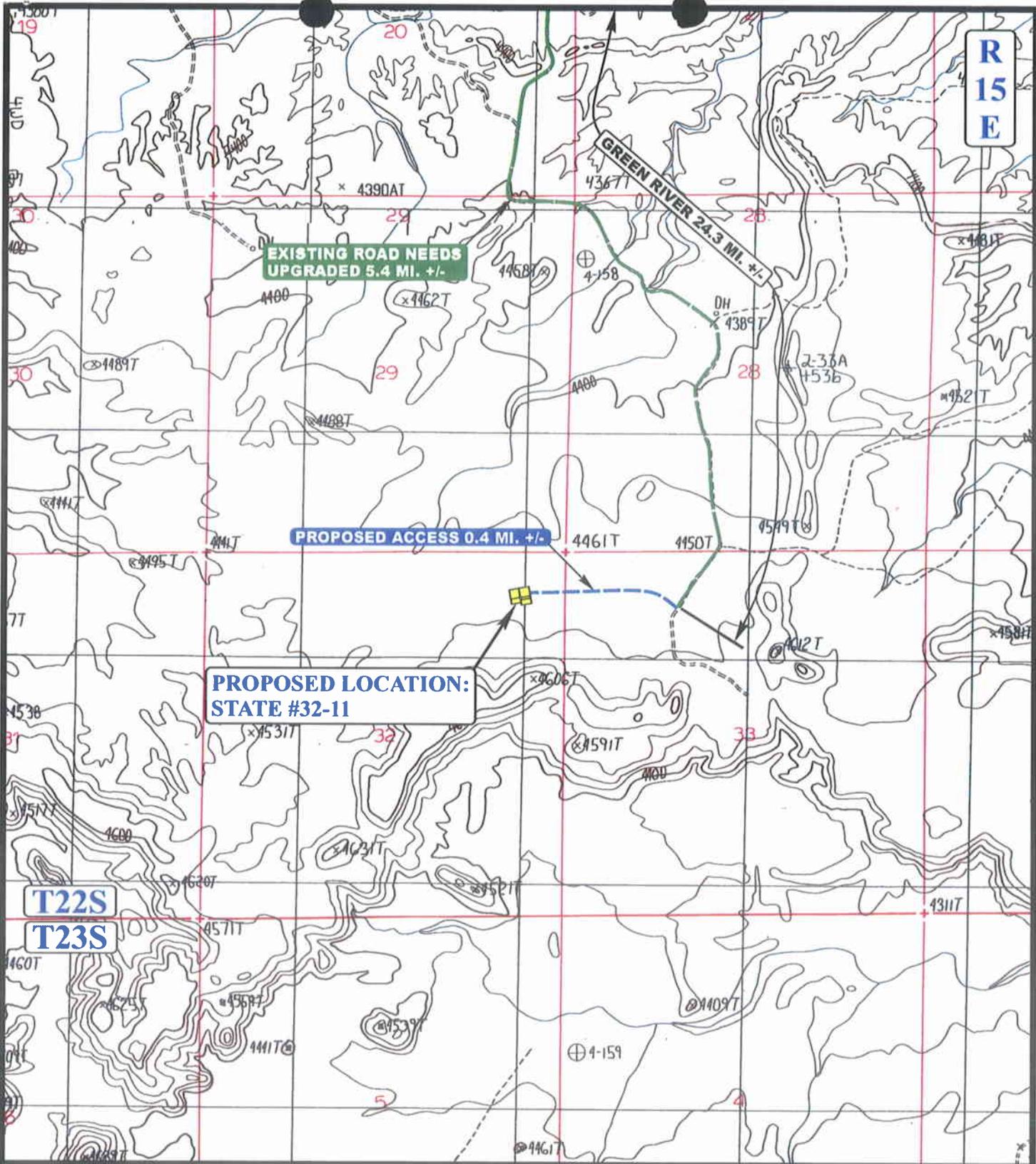
**T22S**

**T23S**

**R  
14  
E**   **R  
15  
E**

<p><b>LEGEND:</b></p> <p>○ PROPOSED LOCATION</p>	<p><b>Petro-Canada (USA), Inc.</b></p> <p><b>STATE #32-11</b></p> <p><b>SECTION 32, T22S, R15E, S.L.B.&amp;M.</b></p> <p><b>660' FNL 660' FEL</b></p>
<p><b>Uintah Engineering &amp; Land Surveying</b> 85 South 200 East Vernal, Utah 84078 (435) 789-1017 * FAX (435) 789-1813</p>	<p><b>TOPOGRAPHIC</b> <b>08 03 07</b></p> <p><b>MAP</b>   <b>MONTH DAY YEAR</b></p> <p><b>SCALE: 1:100,000</b>   <b>DRAWN BY: C.P.</b>   <b>REVISED: 00-00-00</b></p>





**EXISTING ROAD NEEDS  
UPGRADED 5.4 MI. +/-**

**PROPOSED ACCESS 0.4 MI. +/-**

**PROPOSED LOCATION:  
STATE #32-11**

**T22S  
T23S**

**R  
1  
5  
E**

**GREEN RIVER 24.3 MI. +/-**

**LEGEND:**

- PROPOSED ACCESS ROAD
- EXISTING ROAD NEEDS UPGRADED



**Petro-Canada (USA), Inc.**

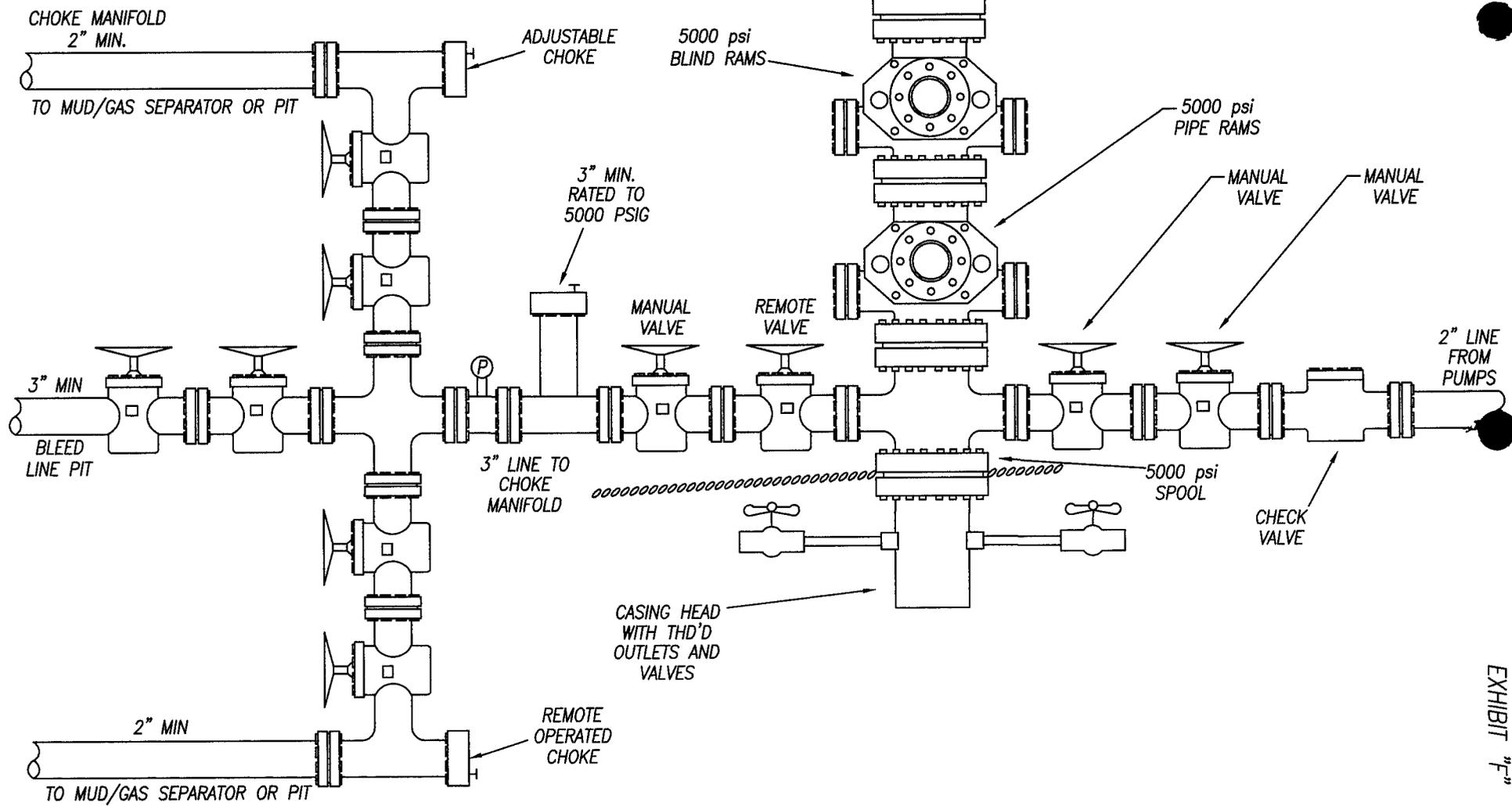
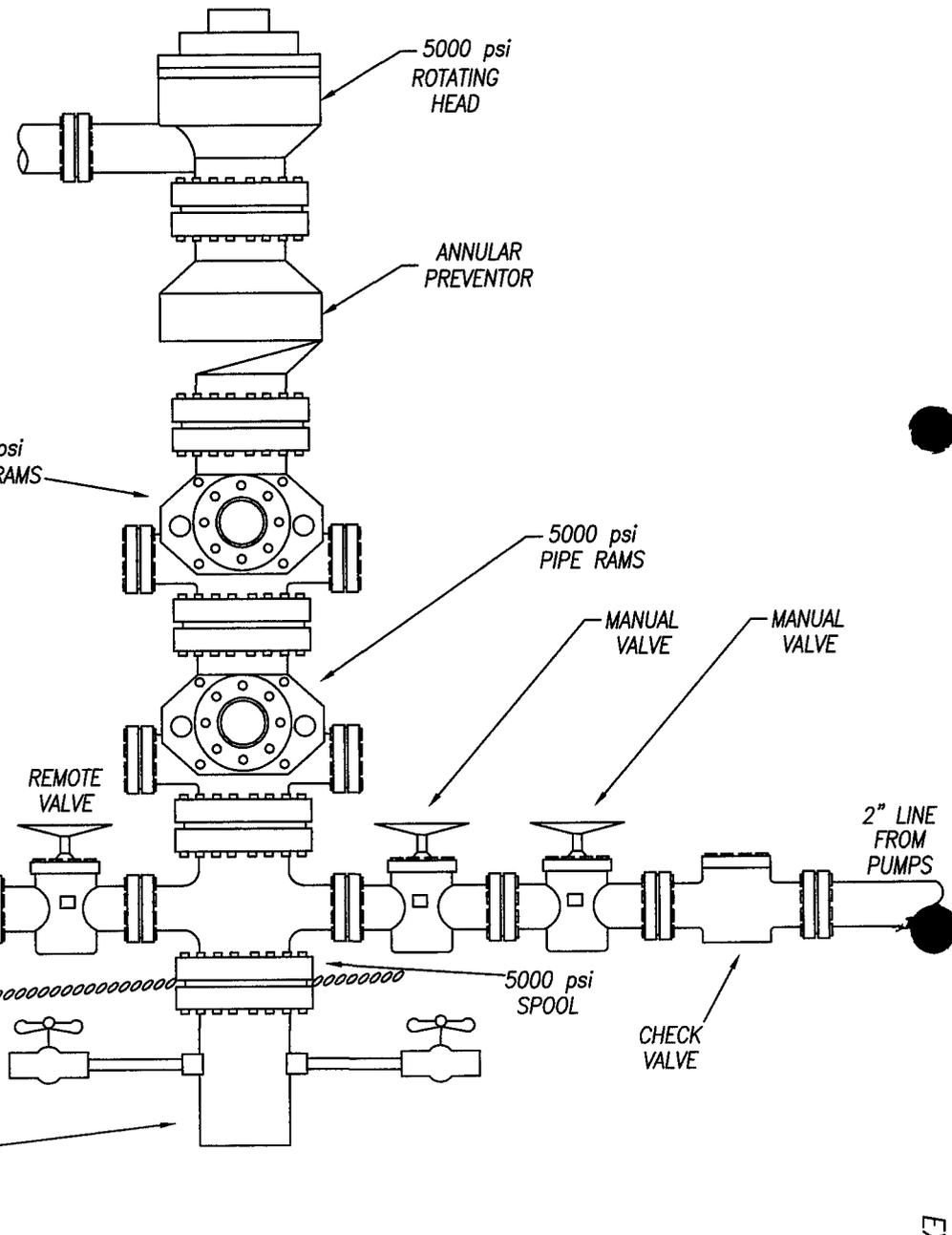
**STATE #32-11  
SECTION 32, T22S, R15E, S.L.B.&M.  
660' FNL 660' FEL**

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

**TOPOGRAPHIC MAP** **08 03 07**  
 MONTH DAY YEAR  
 SCALE: 1" = 2000' DRAWN BY: C.P. REVISED: 00-00-00 **B**  
 TOPO

# BOP Equipment

5000psi WP



**WORKSHEET  
APPLICATION FOR PERMIT TO DRILL**

APD RECEIVED: 09/04/2007

API NO. ASSIGNED: 43-015-30734

WELL NAME: STATE 32-11  
 OPERATOR: PETRO-CANADA RESOURCES ( N2705 )  
 CONTACT: DON HAMILTON

PHONE NUMBER: 303-297-2100

PROPOSED LOCATION:  
 NENE 32 220S 150E  
 SURFACE: 0660 FNL 0660 FEL  
 BOTTOM: 0660 FNL 0660 FEL  
 COUNTY: EMERY  
 LATITUDE: 38.85991 LONGITUDE: -110.2857  
 UTM SURF EASTINGS: 561977 NORTHINGS: 4301265  
 FIELD NAME: WILDCAT ( 1 )

INSPECT LOCATN BY: / /		
Tech Review	Initials	Date
Engineering	DUD	12/21/07
Geology		
Surface		

LEASE TYPE: 3 - State  
 LEASE NUMBER: ML-50651  
 SURFACE OWNER: 3 - State

PROPOSED FORMATION: ~~MSP~~ <sup>PRDX</sup>  
 COALBED METHANE WELL? NO

RECEIVED AND/OR REVIEWED:

Plat  
 Bond: Fed[] Ind[] Sta[] Fee[]  
 (No. 04127699 )

N Potash (Y/N)  
N Oil Shale 190-5 (B) or 190-3 or 190-13  
 Water Permit  
 (No. 91-5140 )

RDCC Review (Y/N)  
 (Date: 09/25/2007 )

WA Fee Surf Agreement (Y/N)  
WA 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: Needs Permit (09-21-07)

STIPULATIONS: 1- Spacing Strip  
2- STATEMENT OF BASIS  
3- Cement Strip # 3A (7" production, 4500' md, Paradox Fm)

T22S R15E

AMAX-SINCLAIR  
GOVT 29-4B  
◇

FEDERAL 1  
◇

30

29

28

31

32

33

STATE 32-II  
⊙

STATE 32-44  
⊙

T23S R15E

6

5

4

OPERATOR: PETRO CANADA RES (N2705)

SEC: 32 T.22S R. 15E

FIELD: WILDCAT (001)

COUNTY: *Emery*

SPACING: R649-3-2 / GENERAL SITING

- 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

**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



OIL, GAS & MINING



PREPARED BY: DIANA MASON  
DATE: 10-SEPTEMBER-2007

# Application for Permit to Drill

## Statement of Basis

10/1/2007

Utah Division of Oil, Gas and Mining

Page 1

<b>APD No</b>	<b>API WellNo</b>	<b>Status</b>	<b>Well Type</b>	<b>Surf Ownr</b>	<b>CBM</b>
540	43-015-30734-00-00		GW	S	No
<b>Operator</b>	PETRO-CANADA RESOURCES (USA), INC		<b>Surface Owner-APD</b>		
<b>Well Name</b>	STATE 32-11	<b>Unit</b>			
<b>Field</b>	UNDESIGNATED	<b>Type of Work</b>			
<b>Location</b>	NENE 32 22S 15E S 660 FNL 660 FEL	GPS Coord (UTM) 561977E 4301265N			

### Geologic Statement of Basis

Significant volumes of high quality ground water are unlikely to be encountered in the bedrock at this location. A permeable soil is likely to be formed on Quaternary age Mixed Windblown Sand and Alluvium deposits covering the Cretaceous-age Cedar Mountain Formation. A small but locally important quality ground water resource may be encountered in several permeable Mesozoic aquifers in this area. The proposed casing and cementing program should adequately isolate any zones of fresh water that may be penetrated. The Operator proposes to use an air/mist mud system to drill the surface casing interval. No underground water rights have been filed on any area within a mile of the proposed well site.

Chris Kierst  
**APD Evaluator**

9/26/2007  
**Date / Time**

### Surface Statement of Basis

On-site evaluation conducted September 21, 2007. In attendance: Bart Kettle-Division of Oil Gas and Mining (DOGM), Jim Davis-Trust Lands Administration (SITLA), Kyle Beagley-Division of Wildlife Resources (DWR), and Don Hamilton-Buys and Associates agent for Petro-Canada Resources (USA), Inc. Providing written comments but not in attendance: Ray Peterson-Emery County and Mike McCandless-Emery County.

To prevent entrance of livestock into the reserve pit area pit should be fenced on three sides while drilling, with the fourth side being fenced upon removal of drilling rig. Due to anticipated salts reserve pit shall contain a functioning liner until reclamation has been completed.

Emery County comments that encroachment permits should be in place for County Roads 1007 and 1043 prior to commencing drilling activities.

Bart Kettle  
**Onsite Evaluator**

9/21/2007  
**Date / Time**

### Conditions of Approval / Application for Permit to Drill

<b>Category</b>	<b>Condition</b>
Pits	A synthetic liner with a minimum thickness of 12 mils shall be properly installed and maintained in the reserve pit.
Surface	The reserve pit shall be fenced upon completion of drilling operations.

# ON-SITE PREDRILL EVALUATION

## Utah Division of Oil, Gas and Mining

**Operator** PETRO-CANADA RESOURCES (USA), INC  
**Well Name** STATE 32-11  
**API Number** 43-015-30734-0 **APD No** 540 **Field/Unit** UNDESIGNATED  
**Location:** 1/4,1/4 NENE **Sec** 32 **Tw** 22S **Rng** 15E 660 FNL 660 FEL  
**GPS Coord (UTM)** **Surface Owner**

### Participants

Bart Kettle-Division of Oil Gas and Mining (DOGGM), Jim Davis-Trust Lands Administration (SITLA), Kyle Beagley-Division of Wildlife Resources (DWR), and Don Hamilton-Buys and Associates agent for Petro-Canada Resources (USA), Inc.

### Regional/Local Setting & Topography

Proposed project site is located ~12 miles southwest of the town of Green River, in Emery County Utah. Annual precipitation is 6-8", and vegetation would be described as salt scrub rangelands. Topography immediately adjacent to the well is a series of dry sandy washes and alternating sand dunes. Drainage is to the west entering the San Rafeal River within five miles. Drainages in the immediate area are ephemeral in nature, being dry throughout a majority of the year.

### Surface Use Plan

#### **Current Surface Use**

Grazing  
Wildlife Habitat

#### **New Road**

Miles	Well Pad	Src Const Material	Surface Formation
0.4	Width 255	Length 290	Onsite
			CDMTN

**Ancillary Facilities** N

### Waste Management Plan Adequate? Y

### Environmental Parameters

**Affected Floodplains and/or Wetland** N

#### **Flora / Fauna**

Flora:

Grass: Indian Rice grass, curly galleta.

Forbs: Rocky Mountain Aster, desert trumpet, scorpion weed, Russian thistle, mustard spp. , desert plantain, annual wire lettuce, globe mallow, halogeton.

Shrubs: Mormon tea, winter fat, shadscale saltbrush, four wing saltbrush, buckwheat spp, broom snakeweed.

Trees: None

Fauna: Small reptile and mammal habitat. Use by pronghorn antelope, coyote and kit fox.

#### **Soil Type and Characteristics**

Sandy loam deposits-quartz pea gravel

**Erosion Issues** N

Sedimentation Issues N

Site Stability Issues N

Drainage Diversion Required N

Berm Required? N

Erosion Sedimentation Control Required? N

Paleo Survey Run? N    Paleo Potential Observed? N    Cultural Survey Run? Y    Cultural Resources? N

**Reserve Pit**

**Site-Specific Factors**

**Site Ranking**

<b>Distance to Groundwater (feet)</b>	>200	0
<b>Distance to Surface Water (feet)</b>	>1000	0
<b>Dist. Nearest Municipal Well (ft)</b>	>5280	0
<b>Distance to Other Wells (feet)</b>	>1320	0
<b>Native Soil Type</b>	High permeability	20
<b>Fluid Type</b>	Fresh Water	5
<b>Drill Cuttings</b>	Salt or Detrimental	10
<b>Annual Precipitation (inches)</b>	<10	0
<b>Affected Populations</b>	<10	0
<b>Presence Nearby Utility Conduits</b>	Not Present	0

**Final Score                    35    1    Sensitivity Level**

**Characteristics / Requirements**

**Closed Loop Mud Required? N    Liner Required? Y    Liner Thickness 12    Pit Underlayment Required? N**

**Other Observations / Comments**

DWR and SITLA provided no additional request or comments. Emery County request that encroachment permits be secured along with plans to maintain County roads 1007 and 1043.

Bart Kettle  
Evaluator

9/21/2007  
Date / Time



Online Services

Agency List

Business

Search

# Utah Division of Water Rights



**There are no features in the query area.**

**Click on the back button to try again**

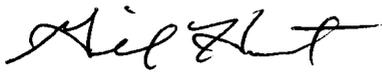
Please direct questions and comments regarding the map server to: [leeschler@utah.gov](mailto:leeschler@utah.gov).

**back**

**close**

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**STATE ACTIONS**  
**Resource Development Coordinating Committee**  
**Public Lands Policy Coordination Office**  
**5110 State Office Building**  
**SLC, UT 84114**  
**Phone No. 537-9230**

<b>1. State Agency</b> Oil, Gas and Mining 1594 West North Temple, Suite 1210 Salt Lake City, UT 84114-5801	<b>2. Approximate date project will start:</b>  Upon Approval or September 25, 2007
<b>3. Title of proposed action:</b> Application for Permit to Drill	
<b>4. Description of Project:</b>  Petro-Canada Resources (USA), Inc. proposes to drill the State 32-11 well (wildcat) on State lease ML-50651, Emery County, Utah. This action is being presented to the RDCC for consideration of resource issues affecting state interests. The Division of Oil, Gas and Mining is the primary administrative agency in this action and must issue approval before operations commence.	
<b>5. Location and detailed map of land affected (site location map required, electronic GIS map preferred)</b> (include UTM coordinates where possible) <b>(indicate county)</b> 660' FNL 660' FEL, NE/4 NE/4, Section 32, Township 22 South, Range 15 East, Emery County, Utah	
<b>6. Possible significant impacts likely to occur:</b> Surface impacts include up to five acres of surface disturbance during the drilling and completion phase (estimated for five weeks duration). If oil and gas in commercial quantities is discovered, the location will be reclaimed back to a net disturbance of between one and two acres – not including road, pipeline, or utility infrastructure. If no oil or gas is discovered, the location will be completely reclaimed.	
<b>7. Identify local government affected</b> a. <b>Has the government been contacted?</b> No. b. <b>When?</b> c. <b>What was the response?</b> d. <b>If no response, how is the local government(s) likely to be impacted?</b>	
<b>8. For acquisitions of land or interests in land by DWR or State Parks please identify state representative and state senator for the project area. Name and phone number of state representative, state senator near project site, if applicable:</b> a. <b>Has the representative and senator been contacted?</b> N/A	
<b>9. Areawide clearinghouse(s) receiving state action:</b> (to be sent out by agency in block 1) Southeastern Utah Association of Governments	
<b>10. For further information, contact:</b>   <b>Diana Mason</b> <b>Phone:</b> (801) 538-5312	<b>11. Signature and title of authorized officer</b>   Gil Hunt, Associate Director <b>Date:</b> September 11, 2007

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

FORM 3

AMENDED REPORT   
(highlight changes)

<b>APPLICATION FOR PERMIT TO DRILL</b>			5. MINERAL LEASE NO: <b>ML-50651</b>	6. SURFACE: State
1A. TYPE OF WORK: DRILL <input checked="" type="checkbox"/> REENTER <input type="checkbox"/> DEEPEN <input type="checkbox"/>			7. IF INDIAN, ALLOTTEE OR TRIBE NAME: N/A	
B. TYPE OF WELL: OIL <input type="checkbox"/> GAS <input checked="" type="checkbox"/> OTHER _____ SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input checked="" type="checkbox"/>			8. UNIT or CA AGREEMENT NAME: N/A	
2. NAME OF OPERATOR: <b>Petro-Canada Resources (USA), Inc.</b>			9. WELL NAME and NUMBER: <b>State 32-11</b>	
3. ADDRESS OF OPERATOR: <b>1099-18th St, Suite 400</b> CITY <b>Denver</b> STATE <b>CO</b> ZIP <b>80202</b>		PHONE NUMBER: <b>(303) 297-2100</b>	10. FIELD AND POOL, OR WILDCAT: <b>undesignated</b>	
4. LOCATION OF WELL (FOOTAGES) AT SURFACE: <b>660' FNL 660' FEL,</b> <i>5619774 38.854908</i> AT PROPOSED PRODUCING ZONE: <i>43012654 -110.285694</i>			11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: <b>NENE 32 22S 15E S</b>	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE: <b>11.55 miles southwest of Green River, Utah</b>			12. COUNTY: <b>Emery</b>	13. STATE: <b>UTAH</b>
15. DISTANCE TO NEAREST PROPERTY OR LEASE LINE (FEET) <b>660'</b>	16. NUMBER OF ACRES IN LEASE: <b>640</b>	17. NUMBER OF ACRES ASSIGNED TO THIS WELL: <b>40</b>		
18. DISTANCE TO NEAREST WELL (DRILLING, COMPLETED, OR APPLIED FOR) ON THIS LEASE (FEET) <b>4,000'</b>	19. PROPOSED DEPTH: <b>7,762</b>	20. BOND DESCRIPTION: <b>Fidelity Bond # 4127699</b>		
21. ELEVATIONS (SHOW WHETHER DF, RT, GR, ETC.): <b>4,470' GR</b>	22. APPROXIMATE DATE WORK WILL START: <b>10/1/2007</b>	23. ESTIMATED DURATION: <b>30 days drilling, 40 days comp.</b>		

**24. PROPOSED CASING AND CEMENTING PROGRAM**

SIZE OF HOLE	CASING SIZE, GRADE, AND WEIGHT PER FOOT	SETTING DEPTH	CEMENT TYPE, QUANTITY, YIELD, AND SLURRY WEIGHT
14-3/4"	10-3/4" N-80 ST 45.5#	4,500	see Drilling Plan
9-7/8"	7" P-110 LT 32#	7,762	see Drilling Plan

**25. ATTACHMENTS**

VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES:

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER | <input checked="" type="checkbox"/> COMPLETE DRILLING PLAN                                   |
| <input type="checkbox"/> EVIDENCE OF DIVISION OF WATER RIGHTS APPROVAL FOR USE OF WATER        | <input type="checkbox"/> FORM 5, IF OPERATOR IS PERSON OR COMPANY OTHER THAN THE LEASE OWNER |

NAME (PLEASE PRINT) Don Hamilton TITLE Agent for Petro-Canada Resources (USA), Inc.  
SIGNATURE *Don Hamilton* DATE 8/31/2007

(This space for State use only)

API NUMBER ASSIGNED: 43015-30734

APPROVAL:

**RECEIVED**  
**SEP 04 2007**

DIV. OF OIL, GAS & MINING

# T22S, R15E, S.L.B.&M.

Petro-Canada (USA), Inc.

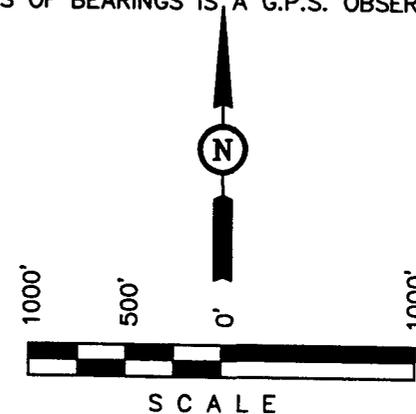
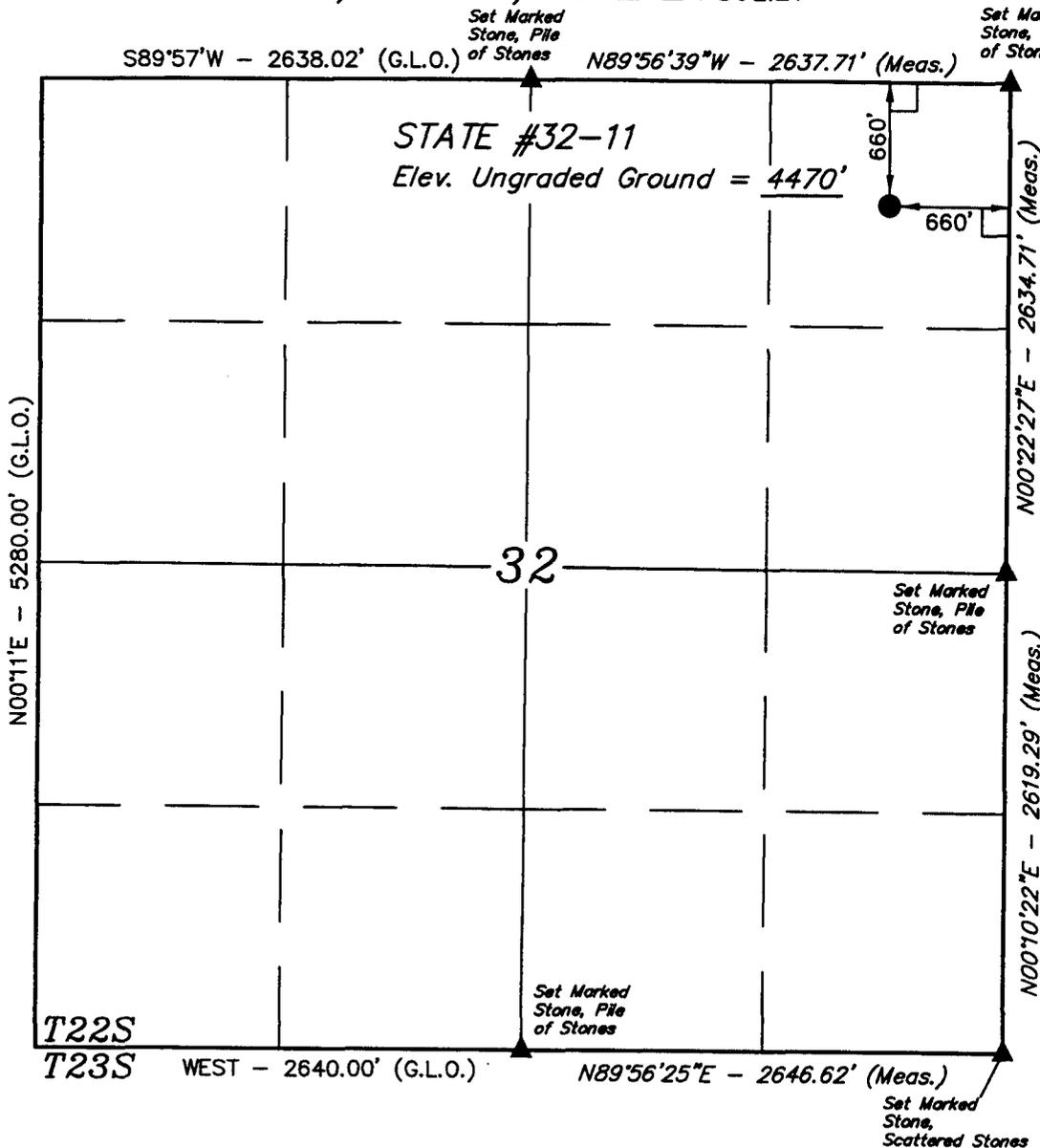
Well location, STATE #32-11, located as shown in the NE 1/4 NE 1/4 of Section 32, T22S, R15E, S.L.B.&M., Emery County, Utah.

## BASIS OF ELEVATION

SPOT ELEVATION LOCATED AT ROAD INTERSECTION, IN THE NW 1/4 NE 1/4 OF SECTION 1, T23S, R15E, S.L.B.&M. TAKEN FROM THE HORSE BENCH EAST, EMERY 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 4244 FEET.

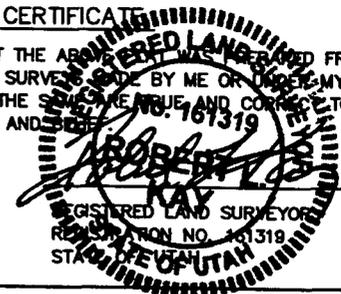
## BASIS OF BEARINGS

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



## CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE SURVEY WAS CONDUCTED FROM FIELD NOTES OF ACTUAL SURVEY MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.



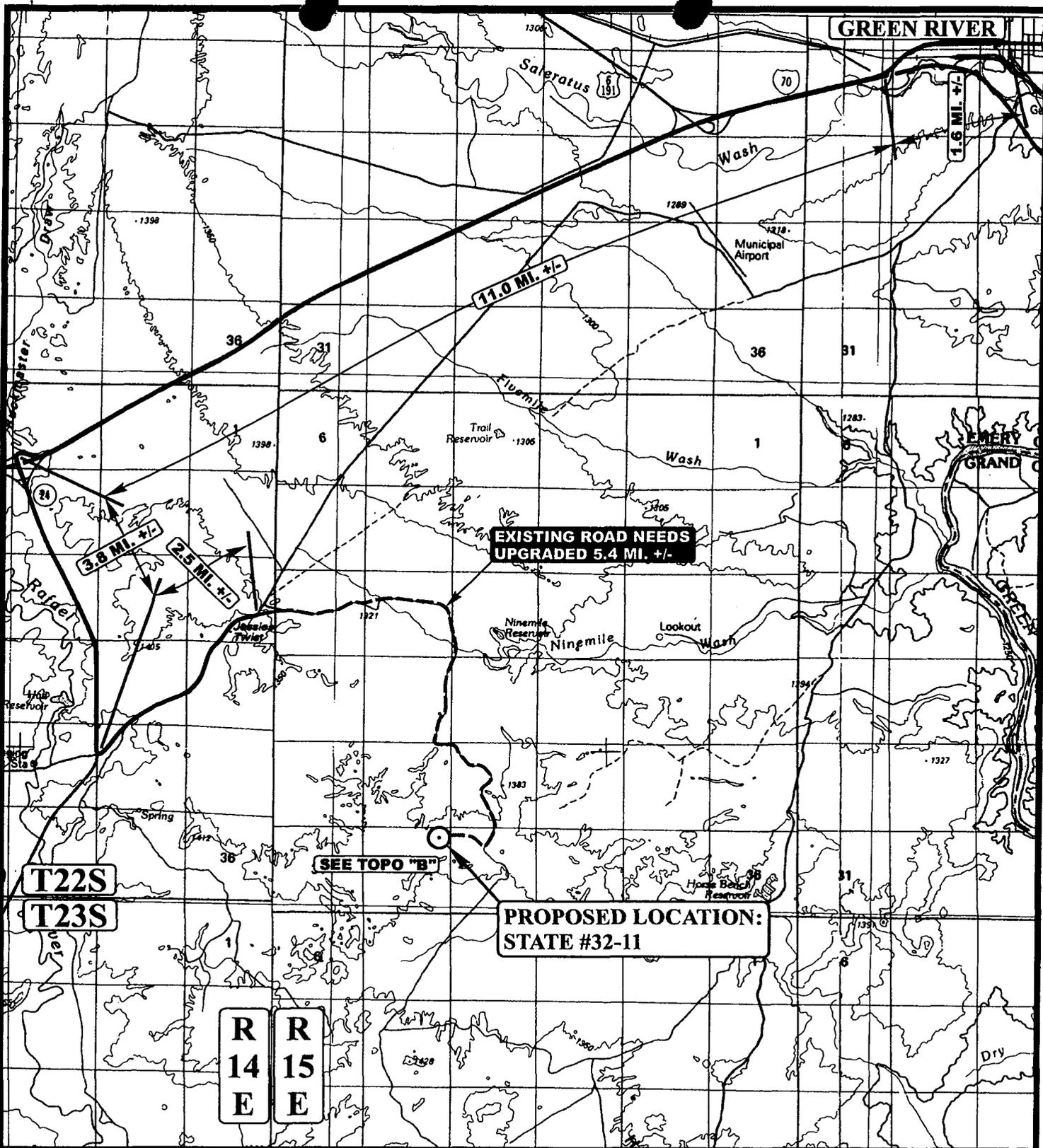
**UINTAH ENGINEERING & LAND SURVEYING**  
 85 SOUTH 200 EAST - VERNAL, UTAH 84078  
 (435) 789-1017

## LEGEND:

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

(AUTONOMOUS NAD 83)  
 LATITUDE = 38°51'35.55" (38.859875)  
 LONGITUDE = 110°17'10.52" (110.286256)  
 (AUTONOMOUS NAD 27)  
 LATITUDE = 38°51'35.64" (38.859900)  
 LONGITUDE = 110°17'08.01" (110.285558)

SCALE 1" = 1000'	DATE SURVEYED: 07-30-07	DATE DRAWN: 08-01-07
PARTY A.F. Z.W. C.H.	REFERENCES G.L.O. PLAT	
WEATHER HOT	FILE Petro-Canada (USA), Inc.	



**LEGEND:**

⊙ PROPOSED LOCATION



**Petro-Canada (USA), Inc.**

STATE #32-11  
SECTION 32, T22S, R15E, S.L.B.&M.  
660' FNL 660' FEL



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

TOPOGRAPHIC  
MAP

08	03	07
MONTH	DAY	YEAR

SCALE: 1:100,000 | DRAWN BY: C.P. | REVISED: 00-00-00



## MEMORANDUM

DATE: September 19, 2007

TO: Resource Development Coordinating Committee

FROM: Utah Geological Survey, Geologic Hazards Program and Ground Water and Paleontology Program

SUBJECT: UGS comments on RDCC items 8390, 8420, 8425, and 8430.

8390. Proposed Round Valley golf and country club development, Morgan County, Utah

Potential geologic hazards in the area that could affect the potential development include alluvial-fan flooding/debris flows, problem soils (shrink/swell and/or collapsible), riverine flooding, and moderate to high indoor radon potential. Responsible planning should address geologic hazards prior to land development and construction. The Utah Geological Survey recommends potential hazards be addressed in a manner appropriate for the intended use of the land. The Utah Geological Survey has general hazards information available at our offices for review.

8420. Trust Lands Administration  
Sec. 36, T10S, R21E, Uintah County  
Special Use Lease Application #1538

Although there are no paleontological localities recorded in our files for this project area, the Eocene Uinta Formation that is exposed here has the potential for yielding significant vertebrate fossil localities. The office of the State Paleontologist therefore recommends that a paleontological survey be conducted for this project and its easements by a paleontologist with a valid permit.

8425. Division of Oil, Gas and Mining  
Short Turn Around Drilling Permit  
Sec. 32, T22S, R15E, Emery County  
Application for Permit to Drill - Petro-Canada Resources (USA), Inc., proposal to drill a wildcat well on State 32-11 on State lease ML-50651.

Although there are no paleontological localities recorded in our files for this project area, the Cretaceous Cedar Mountain Formation that is exposed here has the potential for yielding significant vertebrate fossil localities. The office of the State Paleontologist

therefore recommends that a paleontological survey be conducted for this project and its easements by a paleontologist with a valid permit.

8430. Division of Oil, Gas and Mining

Short Turn Around Drilling Permit

Sec. 32, T34S, R26E, San Juan County

Application for Permit to Drill - Crown Quest Operating, LLC proposal to drill a wildcat well the Chanticleer State 1-32 on State lease ML-48562

Although there are no paleontological localities recorded in our files for this project area, the Cretaceous Dakota and Cedar Mountain/Burro Canyon Formations that are exposed here have the potential for yielding significant vertebrate fossil localities. The office of the State Paleontologist therefore recommends that a paleontological survey be conducted for this project and its easements by a paleontologist with a valid permit.

# SOUTHEASTERN UTAH ASSOCIATION OF LOCAL GOVERNMENTS

**DOUG ALLEN**  
CHAIRMAN

**WILLIAM D. HOWELL**  
EXECUTIVE DIRECTOR



375 SOUTH CARBON AVE.  
P.O. DRAWER 1106  
PRICE, UTAH 84501  
(435) 637-5444  
FAX (435) 637-5448

*Retro*  
*43-015-30734*

## AREA WIDE CLEARINGHOUSE REVIEW

Federal Action \_\_\_\_\_ State Action \_\_\_\_\_ Approved (x) Yes ( ) No  
Other (indicate) \_\_\_\_\_

### Applicant Name/Address:

Oil, Gas & Mining

1594 West North Temple #1210

SLC, UT 84114-5801

Name Diana Mason

Phone 801-538-5312

Title/Project Description: State 32-11 well on State Lease ML 50651, Emery Co.

Wildcat well on State lease just south of Nine Mile Wash and the City of Green River.

[ ] No Comment

[ ] See comment below

Comments: Favorable comment recommended.

Louise Berglund

SEUALG

09/28/07

DATE

2007-10 Petro Canada State 32-11

Casing Schematic

20"

Surface

BHP  $0.052(7762)12 = 4843 \text{ psi}$  anticipate  $5491 \text{ psi}$

Good  $.12(7762) = 930$   
 $4843 - 930 = 3913 \text{ psi, MASP}$

BOPE 5M ✓

Burst 5210  
 $708 \text{ } 3647 \text{ psi}$

Max P@ surf. shoe  
 $.22(3262) = 718$   
 $4843 - 718 = 4125 \text{ psi}$

test to  $3600 \text{ psi}$  ✓

10-3/4"  
 MW 8.3  
 Frac 19.3

Adequate  
 DWD

12/21/07

7"  
 MW 12.

TOC @ 0. Cedar Mtn. 60. MD

- 1229' Carmel
- 1441' Navajo
- 1899' Kayenta
- 2158' Wingate
- 2467' Chinle
- 2746' Shinapump.
- 2806 Moenkopi
- 3298' Sinbad
- 3482' White Rim
- 3971' Organ Rock
- 4193' Honaker Trail

Rotating head attached to conductor until surface log set.

Surface  
 4500. MD

- 5038' Paradox
- 5197 TOC w/0% w/o

Propose TOC @ 5500'  
 \*STIP TOC to 4500' ✓

TOC @ 6288' Paradox Salt - Top  
 6065.

7200' Base Paradox Salt

7588' Loadville  
 7638' Top Mississippian Porosity  
 7722' Base Mississippian Porosity  
 7762. MD

Amend to 7588' ✓  
 OK.

Well name:	<b>2007-10 Petro Canada State 32-11</b>	
Operator:	<b>Petro-Canada Resources (USA) Inc.</b>	
String type:	Surface	Project ID: 43-015-30734
Location:	Emery County	

**Design parameters:**

**Collapse**

Mud weight: 8.330 ppg  
Design is based on evacuated pipe.

**Minimum design factors:**

**Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Environment:**

H2S considered? No  
Surface temperature: 75 °F  
Bottom hole temperature: 138 °F  
Temperature gradient: 1.40 °F/100ft  
Minimum section length: 290 ft

Cement top: Surface

**Burst**

Max anticipated surface pressure: 3,907 psi  
Internal gradient: 0.120 psi/ft  
Calculated BHP 4,447 psi

No backup mud specified.

**Tension:**

8 Round STC: 1.80 (J)  
8 Round LTC: 1.80 (J)  
Buttress: 1.60 (J)  
Premium: 1.50 (J)  
Body yield: 1.50 (B)

Tension is based on buoyed weight.  
Neutral point: 3,943 ft

**Non-directional string.**

**Re subsequent strings:**

Next setting depth: 7,762 ft  
Next mud weight: 12.000 ppg  
Next setting BHP: 4,839 psi  
Fracture mud wt: 19.250 ppg  
Fracture depth: 4,500 ft  
Injection pressure: 4,500 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
1	4500	10.75	45.50	N-80	ST&C	4500	4500	9.875	2429.8
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	1947	2470	1.268	4447	5210	1.17	179	701	3.91 J

Prepared by: Helen Sadik-Macdonald  
Div of Oil, Gas & Minerals

Phone: 801-538-5357  
FAX: 801-359-3940

Date: October 31, 2007  
Salt Lake City, Utah

**Remarks:**

Collapse is based on a vertical depth of 4500 ft, a mud weight of 8.33 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Well name:	<b>2007-10 Petro Canada State 32-11</b>	
Operator:	<b>Petro-Canada Resources (USA) Inc.</b>	
String type:	Production	Project ID: 43-015-30734
Location:	Emery County	

**Design parameters:**

**Collapse**  
 Mud weight: 12.000 ppg  
 Design is based on evacuated pipe.

**Minimum design factors:**

**Collapse:**  
 Design factor 1.125  
 2.00 for salt

**Environment:**

H2S considered? No  
 Surface temperature: 75 °F  
 Bottom hole temperature: 184 °F  
 Temperature gradient: 1.40 °F/100ft  
 Minimum section length: 1,500 ft  
 Cement top: 6,065 ft

**Burst**

Max anticipated surface pressure: 3,131 psi  
 Internal gradient: 0.220 psi/ft  
 Calculated BHP: 4,839 psi  
 No backup mud specified.

**Burst:**

Design factor 1.00

**Tension:**

8 Round STC: 1.80 (J)  
 8 Round LTC: 1.80 (J)  
 Buttress: 1.60 (J)  
 Premium: 1.50 (J)  
 Body yield: 1.50 (B)

**Non-directional string.**

Tension is based on buoyed weight.  
 Neutral point: 6,353 ft

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
1	7762	7	32.00	P-110	LT&C	7762	7762	6	1572.2
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	4839	10780	2.228	4839	12460	2.58	203	897	4.41 J

Prepared by: Helen Sadik-Macdonald  
 Div of Oil, Gas & Minerals

Phone: 801-538-5357  
 FAX: 801-359-3940

Date: October 31, 2007  
 Salt Lake City, Utah

Remarks:  
 Collapse is based on a vertical depth of 7762 ft, a mud weight of 12 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

## Helen Sadik-Macdonald - Re: Surface casing State 32-11

---

From: Helen Sadik-Macdonald  
 To: Olson, Greg  
 Date: 11/09/2007 9:25 AM  
 Subject: Re: Surface casing State 32-11  
 CC: Dustin Doucet; Miller, Susan

---

Greg,

Thank you for your response. We are more comfortable now that a rotating head will be used for drilling in the surface casing. Please re-submit your drilling plan narrative to include the rotating head and changed TD. I will line-out the TD and set depth on the Form 3 already submitted. The narrative can be e-mailed to me.

Monday is a state and federal holiday. I will call you on your cell phone to apprise you of this e-mail. *called 10:15 11/9*  
 Respectfully,

*Helen Sadik-Macdonald, CPG, PG  
 Petroleum Engineering Services  
 Utah Div. of Oil, Gas & Mining  
 PO Box 145801  
 Salt Lake City, UT 84114-5801*

801/538-5357 Desk  
 801/359-3940 Fax

>>> On 11/08/2007 at 5:41 PM, in message <9CA988AA078E7E45A015EFEBFEEC8EBA0393BD27@PCAM1.pcacorp.net>, "Olson, Greg" <Greg.Olson@petro-canada.com> wrote:

Hello Helen,

Thanks for the call. As far as drilling surface hole to 4500', we will have a rotating head on conductor pipe until casing is run. We also need to get this APD changed to TD the well at the top of the Mississippian. I'm assuming we'll need to get you a revised APD with a sundry, but please let me know what you need for documentation to support this and we'll get it to you. If this is not adequate in your eyes, we can discuss tomorrow or next week. I'll be out of the office tomorrow, but I will be on my cell phone if you'd like to discuss.

Thanks.

Greg Olson

U.S. Drilling Manager

Petro-Canada

(303) 350-1185 office

(303) 241-9538 cell

greg.olson@petro-canada.com

*Changed manually to top of Miss. @ 7588'*

---

This email communication is intended as a private communication for the sole use of the primary addressee and those individuals listed for copies in the original message. The information contained in this email is private and confidential and if

**From:** Ed Bonner  
**To:** Mason, Diana  
**Date:** 9/14/2007 5:12 PM  
**Subject:** Well Clearance

**CC:** Davis, Jim; Garrison, LaVonne; Hill, Brad; Hunt, Gil

The following wells have been given cultural resources clearance by the Trust Lands Cultural Resources Group:

EOG Resources, Inc

Chapita Wells Unit 732-32 (API 43 047 39599)

Chapita Wells Unit 731-32 (API 43 047 39582)

Questar Exploration & Production Company

RW 23-32BW (API 43 047 39182)

RW 21-32BW (API 43 047 39183)

Petro-Canada Resources (USA), Inc

State 32-11 (API 43 015 30734)

Williams Production RMT Company

State Reservation Ridge 42-2 (API 43 013 33758)

If you have any questions regarding this matter please give me a call.

**From:** Robert Clark  
**To:** Mason, Diana  
**Date:** 9/17/2007 10:24 AM  
**Subject:** RDCC short turn-around comments

**CC:** Anderson, Tad; Mcneill, Dave; Wright, Carolyn

The following comments are submitted on short turn-around items **RDCC #8425 through RDCC #8432**.

**RDCC #8425, Comments begin:** The Petro-Canada Resources (USA), Inc. proposal to drill the State 32-11 wildcat well, in Emery County, may require a permit, known as an Approval Order, from the Executive Secretary of the Air Quality Board. If any compressor or pump stations are constructed at the site, a permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, Salt Lake City, Utah, 84116 for review according to the Utah Air Quality Rule R307-401. Permit: Notice of Intent and Approval Order. A copy of the rules is found at [www.rules.utah.gov/publicat/code/r307/r307.htm](http://www.rules.utah.gov/publicat/code/r307/r307.htm).

The proposed project is also subject to Utah Air Quality Rule R307-205-5, Fugitive Dust, due to the fugitive dust that is generated during the excavating phases of the project. These rules apply to construction activities that disturb an area greater than 1/4 acre in size. A permit, known as an Approval Order, is not required from the Executive Secretary of the Air Quality Board, but steps need to be taken to minimize fugitive dust, such as watering and/or chemical stabilization, providing vegetative or synthetic cover or windbreaks. A copy of the rules may be found at [www.rules.utah.gov/publicat/code/r307/r307.htm](http://www.rules.utah.gov/publicat/code/r307/r307.htm). **Comments end.**

**RDCC #8426, Comments begin:** The CrownQuest Operating, LLC proposal to drill the Raider 1-17 wildcat well, in San Juan County, may require a permit, known as an Approval Order, from the Executive Secretary of the Air Quality Board. If any compressor or pump stations are constructed at the site, a permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, Salt Lake City, Utah, 84116 for review according to the Utah Air Quality Rule R307-401. Permit: Notice of Intent and Approval Order. A copy of the rules is found at [www.rules.utah.gov/publicat/code/r307/r307.htm](http://www.rules.utah.gov/publicat/code/r307/r307.htm).

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**RDCC #8427, Comments begin:** The CrownQuest Operating, LLC proposal to drill the Dragon State 1-13 wildcat well, in San Juan County, may require a permit, known as an Approval Order, from the Executive Secretary of the Air Quality Board. If any compressor or pump stations are constructed at the site, a permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, Salt Lake City, Utah, 84116 for review according to the Utah Air Quality Rule R307-401. Permit: Notice of Intent and Approval Order. A copy of the rules is found at [www.rules.utah.gov/publicat/code/r307/r307.htm](http://www.rules.utah.gov/publicat/code/r307/r307.htm).

The proposed project is also subject to Utah Air Quality Rule R307-205-5, Fugitive Dust, due to the fugitive dust that is generated during the excavating phases of the project. These rules apply to construction activities that disturb an area greater than 1/4 acre in size. A permit, known as an Approval Order, is not required from the Executive Secretary of the Air Quality Board, but steps need to be taken to minimize fugitive dust, such as watering and/or chemical stabilization, providing vegetative or synthetic cover or windbreaks. A copy of the rules may be found at [www.rules.utah.gov/publicat/code/r307/r307.htm](http://www.rules.utah.gov/publicat/code/r307/r307.htm). **Comments end.**

**RDCC #8428, Comments begin:** The CrownQuest Operating, LLC proposal to drill the Banana Slug Federal 1-8 wildcat well, in San Juan County, may require a permit, known as an Approval Order, from the Executive Secretary of the Air Quality Board. If any compressor or pump stations are constructed at the site, a permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, Salt Lake City, Utah, 84116 for review according to the Utah Air Quality Rule R307-401. Permit: Notice of Intent and Approval Order. A copy of the rules is found at [www.rules.utah.gov/publicat/code/r307/r307.htm](http://www.rules.utah.gov/publicat/code/r307/r307.htm).

The proposed project is also subject to Utah Air Quality Rule R307-205-5, Fugitive Dust, due to the fugitive dust that is generated during the excavating phases of the project. These rules apply to construction activities that disturb an area greater than 1/4 acre in size. A permit, known as an Approval Order, is not required from the Executive Secretary of the Air Quality Board, but steps need to be taken to minimize fugitive dust, such as watering and/or chemical stabilization, providing

vegetative or synthetic cover or windbreaks. A copy of the rules may be found at [www.rules.utah.gov/publicat/code/r307/r307.htm](http://www.rules.utah.gov/publicat/code/r307/r307.htm). **Comments end.**

**RDCC #8429, Comments begin:** The CrownQuest Operating, LLC proposal to drill the Anteater State 1-21 wildcat well, in San Juan County, may require a permit, known as an Approval Order, from the Executive Secretary of the Air Quality Board. If any compressor or pump stations are constructed at the site, a permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, Salt Lake City, Utah, 84116 for review according to the Utah Air Quality Rule R307-401. Permit: Notice of Intent and Approval Order. A copy of the rules is found at [www.rules.utah.gov/publicat/code/r307/r307.htm](http://www.rules.utah.gov/publicat/code/r307/r307.htm).

The proposed project is also subject to Utah Air Quality Rule R307-205-5, Fugitive Dust, due to the fugitive dust that is generated during the excavating phases of the project. These rules apply to construction activities that disturb an area greater than 1/4 acre in size. A permit, known as an Approval Order, is not required from the Executive Secretary of the Air Quality Board, but steps need to be taken to minimize fugitive dust, such as watering and/or chemical stabilization, providing vegetative or synthetic cover or windbreaks. A copy of the rules may be found at [www.rules.utah.gov/publicat/code/r307/r307.htm](http://www.rules.utah.gov/publicat/code/r307/r307.htm). **Comments end.**

**RDCC #8430, Comments begin:** The CrownQuest Operating, LLC proposal to drill the Chanticleer State 1-32 wildcat well, in San Juan County, may require a permit, known as an Approval Order, from the Executive Secretary of the Air Quality Board. If any compressor or pump stations are constructed at the site, a permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, Salt Lake City, Utah, 84116 for review according to the Utah Air Quality Rule R307-401. Permit: Notice of Intent and Approval Order. A copy of the rules is found at [www.rules.utah.gov/publicat/code/r307/r307.htm](http://www.rules.utah.gov/publicat/code/r307/r307.htm).

The proposed project is also subject to Utah Air Quality Rule R307-205-5, Fugitive Dust, due to the fugitive dust that is generated during the excavating phases of the project. These rules apply to construction activities that disturb an area greater than 1/4 acre in size. A permit, known as an Approval Order, is not required from the Executive Secretary of the Air Quality Board, but steps need to be taken to minimize fugitive dust, such as watering and/or chemical stabilization, providing vegetative or synthetic cover or windbreaks. A copy of the rules may be found at [www.rules.utah.gov/publicat/code/r307/r307.htm](http://www.rules.utah.gov/publicat/code/r307/r307.htm). **Comments end.**

**RDCC #8431, Comments begin:** The CrownQuest Operating, LLC proposal to drill the Explorer State 1-16 wildcat well, in San Juan County, may require a permit, known as an Approval Order, from the Executive Secretary of the Air Quality Board. If any compressor or pump stations are constructed at the site, a permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, Salt Lake City, Utah, 84116 for review according to the Utah Air Quality Rule R307-401. Permit: Notice of Intent and Approval Order. A copy of the rules is found at [www.rules.utah.gov/publicat/code/r307/r307.htm](http://www.rules.utah.gov/publicat/code/r307/r307.htm).

The proposed project is also subject to Utah Air Quality Rule R307-205-5, Fugitive Dust, due to the fugitive dust that is generated during the excavating phases of the project. These rules apply to construction activities that disturb an area greater than 1/4 acre in size. A permit, known as an Approval Order, is not required from the Executive Secretary of the Air Quality Board, but steps need to be taken to minimize fugitive dust, such as watering and/or chemical stabilization, providing vegetative or synthetic cover or windbreaks. A copy of the rules may be found at [www.rules.utah.gov/publicat/code/r307/r307.htm](http://www.rules.utah.gov/publicat/code/r307/r307.htm). **Comments end.**

**RDCC #8432, Comments begin:** The Delta Petroleum Corporation proposal to drill the Greentown State #31-362216 wildcat well, in Grand County, may require a permit, known as an Approval Order, from the Executive Secretary of the Air Quality Board. If any compressor or pump stations are constructed at the site, a permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, Salt Lake City, Utah, 84116 for review according to the Utah Air Quality Rule R307-401. Permit: Notice of Intent and Approval Order. A copy of the rules is found at [www.rules.utah.gov/publicat/code/r307/r307.htm](http://www.rules.utah.gov/publicat/code/r307/r307.htm).

The proposed project is also subject to Utah Air Quality Rule R307-205-5, Fugitive Dust, due to the fugitive dust that is generated during the excavating phases of the project. These rules apply to construction activities that disturb an area greater than 1/4 acre in size. A permit, known as an Approval Order, is not required from the Executive Secretary of the Air Quality Board, but steps need to be taken to minimize fugitive dust, such as watering and/or chemical stabilization, providing vegetative or synthetic cover or windbreaks. A copy of the rules may be found at [www.rules.utah.gov/publicat/code/r307/r307.htm](http://www.rules.utah.gov/publicat/code/r307/r307.htm). **Comments end.**

Robert Clark  
Division of Air Quality  
801-536-4435



JON M. HUNTSMAN, JR.  
Governor

GARY R. HERBERT  
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

December 24, 2007

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

Re: State 32-11 Well, 660' FNL, 660' FEL, NE NE, Sec. 32, T. 22 South, R. 15 East,  
Emery 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 43-015-30734.

Sincerely,

(for) Gil Hunt  
Associate Director

pab  
Enclosures

cc: Emery County Assessor  
SITLA

Operator: Petro-Canada Resources (USA), Inc.  
Well Name & Number State 32-11  
API Number: 43-015-30734  
Lease: ML-50651

Location: NE NE                      Sec. 32                      T. 22 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

The operator is required to notify the Division of Oil, Gas and Mining of the following action during drilling of this well:

- 24 hours prior to cementing or testing casing – contact Dan Jarvis
- 24 hours prior to testing blowout prevention equipment – contact Dan Jarvis
- 24 hours prior to spudding the well – contact Carol Daniels
- Within 24 hours of any emergency changes made to the approved drilling program – contact Dustin Doucet
- Prior to commencing operations to plug and abandon the well – contact Dan Jarvis

The operator is required to get approval from the Division of Oil, Gas and Mining before performing any of the following actions during the drilling of this well:

- Plugging and abandonment or significant plug back of this well – contact Dustin Doucet
- Any changes to the approved drilling plan – contact Dustin Doucet

The following are Division of Oil, Gas and Mining contacts and their telephone numbers (please leave a voice mail message if the person is not available to take the call):

- Dan Jarvis at:                      (801) 538-5338 office                      (801) 942-0873 home
- Carol Daniels at:                      (801) 538-5284 office
- Dustin Doucet at:                      (801) 538-5281 office                      (801) 733-0983 home

#### 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. Compliance with the State of Utah Antiquities Act forbids disturbance of archeological, historical, or paleontological remains. Should archeological, historical or paleontological remains be encountered during your operations, you are required to immediately suspend all operations and immediately inform the Trust Lands Administration and the Division of State History of the discovery of such remains.
5. Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis. (Copy Attached)
6. The Application for Permit to Drill has been forwarded to the Resource Development Coordinating Committee for review of this action. The operator will be required to comply with any applicable recommendations resulting from this review.
7. 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.
8. Cement volume for the 7" production string shall be determined from actual hole diameter in order to place cement from the pipe setting depth back to 4500' MD in order to adequately isolate the Paradox formation.

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

FORM 9

**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: ML-50651
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: 660' FNL & 660' FEL, QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NENE 32 22S 15E S		8. WELL NAME and NUMBER: State 32-11
PHONE NUMBER: (303) 297-2100		9. API NUMBER: 4301530734
COUNTY: Emery		10. FIELD AND POOL, OR WILDCAT: undesignated
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"/> 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"/> 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 with the original permit being approved 12/24/08.

Approved by the  
Utah Division of  
Oil, Gas and Mining

Date: 09-25-08  
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>9/17/2008</u>

(This space for State use only)

**COPY SENT TO OPERATOR**

Date: 2.29.2008

Initials: KS

RECEIVED

SEP 23 2008

(5/2000)

(See Instructions on Reverse Side)

DIV. OF OIL, GAS & MINING

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

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

**API:** 4301530734  
**Well Name:** State 32-11  
**Location:** 660' FNL & 660' FEL, NE NE, S. 32, T22S, R15E,  
**Company Permit Issued to:** Petro-Canada Resources (USA) Inc.  
**Date Original Permit Issued:** 12/24/2007

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

9/17/2008  
Date

Title: Agent

Representing: Petro-Canada Resources (USA) Inc.

RECEIVED

SEP 23 2008

DIV. OF OIL, GAS & MINING

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

**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: ML-50651
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: undesigned
4. LOCATION OF WELL FOOTAGES AT SURFACE: 660' FNL & 660' FEL, QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NENE 32 22S 15E S		8. WELL NAME and NUMBER: State 32-11
		9. API NUMBER: 4301530734
		10. FIELD AND POOL, OR WILDCAT: undesigned
		COUNTY: Emery
		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"/> 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"/> 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 second extension that has been requested with the original permit being approved 12/24/07.

Approved by the  
Utah Division of  
Oil, Gas and Mining

Date: 09-09-09  
By: [Signature]

COPY SENT TO OPERATOR  
Date: 9.10.2009  
Initials: KS

NAME (PLEASE PRINT) <u>Don Hamilton</u>	TITLE <u>Agent for Petro-Canada Resources (USA), Inc.</u>
SIGNATURE <u>Don Hamilton</u>	DATE <u>9/1/2009</u>

(This space for State use only)

**RECEIVED**  
**SEP 03 2009**

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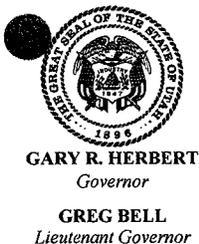
Don Hamilton  
Signature

9/1/2009  
Date

Title: Agent

Representing: Petro-Canada Resources (USA) Inc.

RECEIVED  
SEP 03 2009  
DIV. OF OIL, GAS & MINING



# 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 – State 32-11, Sec. 32, T. 22S, R. 15E  
Emery County, Utah API No. 43-015-30734

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 December 24, 2007. On September 25, 2008 and September 9, 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  
SITLA, Ed Bonner

