

State of Colorado  
**Oil and Gas Conservation Commission**

1120 Lincoln Street, Suite 801, Denver, Colorado 80203 (303)894-2100 Fax: (303)894-2109



FOR OGCC USE ONLY

**EARTHEN PIT REPORT/PERMIT**

This form is to be used for both reporting and permitting pits. Rule 903 describes when a Permit with prior approval, or a Report within 30 days, is required for pits. Submit required attachments and forms.

**Complete the  
Attachment Checklist**

**FORM SUBMITTED FOR:**

☐ Pit Report

☒ Pit Permit

	Oper	OGCC
Detailed Site Plan	✓	
Topo Map w/ Pit Location	✓	
Water Analysis (Form 25)		
Source Wells (Form 26)		
Pit Design/Plan & Cross Sect	✓	
Design Calculations	✓	
Sensitive Area Determ.		
Mud Program		
Form 2A		

OGCC Operator Number: 100185  
Name of Operator: Encana Oil & Gas  
Address: 370 17th Street, Suite 1700  
City: Denver State: CO Zip: 80202

Contact Name and Telephone:  
Jeff Villalobos/ Judy Walter  
No: 720-876-5631/720-876-3702  
Fax: 720-876-4702 Judy's Fax

API Number (of associated well): 05-045-09140-000 OGCC Facility ID (of other associated facility):  
Pit Location (QtrQtr, Sec, Twp, Rng, Meridian): NENW Sec 28, T6S, 100W  
Latitude: 39.508645 Longitude: -108.560665 County: Garfield  
Pit Use: ☒ Production ☐ Drilling (Attach mud program) ☐ Special Purpose (Describe Use): Pit will be used for holding fresh water for Completions  
Pit Type: ☒ Lined ☐ Unlined Surface Discharge Permit: ☐ Yes ☐ No  
Offsite disposal of pit contents: ☐ Injection ☐ Commercial Pit/Facility Name: NA Pit/Facility No: NA  
**Attach Form 26 to identify Source Wells and Form 25 to provide Produced Water Analysis results.**

**Existing Site Conditions**

Is the location in a "Sensitive Area?" ☐ Yes ☒ No **Attach data used for determination.**  
Distance (in feet) to nearest surface water: 336' ground water: 3' water wells: 7485'  
**LAND USE (or attach copy of Form 2A if previously submitted for associated well) Select one which best describes land use:**  
Crop Land: ☐ Irrigated ☐ Dry Land ☐ Improved Pasture ☐ Hay Meadow ☐ CRP  
Non-Crop Land: ☒ Rangeland ☐ Timber ☐ Recreational ☐ Other (describe):  
Subdivided: ☐ Industrial ☐ Commercial ☐ Residential  
**SOILS (or attach copy of Form 2A if previously submitted for associated well)**  
Soil map units from USNRCS survey: Sheet No: Soil Complex/Series No: 46  
Soils Series Name: Happle-Rock outcrop association Horizon thickness (in inches): A: ; B: ; C:  
Soils Series Name: Horizon thickness (in inches): A: ; B: ; C:  
**Attach detailed site plan and topo map with pit location.**

**Pit Design and Construction**

Size of pit (feet): Length: 140' Width: 70' Depth: 18'  
Calculated pit volume (bbls): 10,210 Daily inflow rate (bbls/day): 10,000  
Daily disposal rates (attach calculations): Evaporation: Natural bbls/day Percolation: NA bbls/day  
Type of liner material: HDPE, Secondary Geosynthetic Clay Line Thickness: 24 Mil RPD  
**Attach description of proposed design and construction (include sketches and calculations).**  
Method of treatment of produced water prior to discharge into pit (separator, heater treater, other): will not be discharging into pit  
Is pit fenced? ☒ Yes ☐ No Is pit netted? ☒ Yes ☐ No

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct, and complete.

Print Name: Judith (Judy) Walter

Signed: *Judith Walter*

Title: Regulatory Analyst

Date: 06/29/2010

OGCC Approved: Title: Date:

CONDITIONS OF APPROVAL, IF ANY:

**FACILITY NUMBER:**

SCALE: 1" = 50'  
 DATE: 03-05-10  
 DRAWN BY: D.R.B.  
 Rev: 04-09-10 D.R.B.  
 Rev: 06-28-10 D.R.B.

# EnCana OIL & GAS (USA) INC.

FIGURE #1

## CONSTRUCTION LAYOUT FOR CEDAR BENCH 6311 (C28 6100) SECTION 28, T6S, R100W, 6th P.M. 1198' FNL 2085' FWL

### NOTE:

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

Approx. Top of Cut Slope

Topsoil Berm

RUN-ON PROTECTION

FLARE PIT

C-36.2'  
 El. 55.1'  
 (Btm. Pit)

RESERVE PITS  
 (18' Deep)

NO DISTURBANCE  
 BEYOND EXISTING FENCE

Total Pit Capacity  
 = 10,210 Bbls.±  
 Total Pit Volume  
 = 2,790 Cu. Yds

### SWMP LEGEND:

ECB - EROSION CONTROL BLANKET  
 SCE - STABILIZED CONSTRUCTION ENTRANCE  
 SedR - SEDIMENT RESERVOIR  
 SL - SLASH  
 ST - SEDIMENT  
 T - TERRACING  
 TB - TOE BERM  
 VB - VEGETATED BUFFER  
 W - WATTLE

C-23.9'  
 El. 42.8'  
 (Btm. Pit)

C-4.0'  
 El. 40.9'

Spoils Excess Stockpile

GRADE  
 El. 36.9'

Detention Pond

1.00 Ac. to Deten. Pond #1  
 4,000 cu.ft./Ac. Pad  
 Vol. = 4,000 cu.ft.  
 L= 55', W=35', D=6'

Dehy

Meter

C-0.2'  
 El. 37.1'

C-0.1'  
 El. 37.0'

C-2.3'  
 El. 39.2'

SCE

Detention Pond

Round Corners as Needed

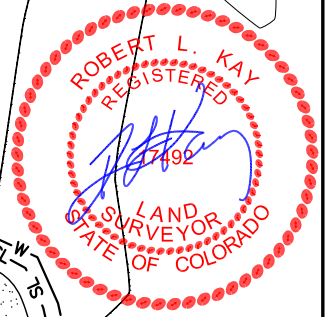
Sta. 0+58

Proposed Access Road

0.37 Ac. to Deten. Pond #2  
 4,000 cu.ft./Ac. Pad  
 Vol. = 1,488 cu.ft.  
 L= 40', W=25', D=4'

GRADE  
 El. 36.9'

Sta. 3+25



Sta. 1+50

F-2.7'  
 El. 34.2'

Topsoil Berm

Approx. Toe of Fill Slope

0.19 Ac. to Sed. Res. #1  
 3,600 cu.ft./Ac. Drainage  
 Vol. = 684 cu.ft.  
 L= 45', W=10', D=4'

Sta. 0+58

Round Corners as Needed

Detention Pond

Sta. 0+58

Proposed Access Road

Sta. 0+58

Sta. 0+58

Sta. 0+58

Sta. 0+58

Sta. 0+58

Sta. 0+58

Sta. 0+58

Sta. 0+58

Sta. 0+58

Sta. 0+58

Elev. Ungraded Ground At Loc. Stake = 6636.9'  
 FINISHED GRADE ELEV. AT LOC. STAKE = 6636.9'

UINTAH ENGINEERING & LAND SURVEYING  
 85 So. 200 East \* Vernal, Utah 84078 \* (435) 789-1017

NOTE:  
 Wattle to be installed 25' downhill of slash and topsoil stockpile.



# EnCana OIL & GAS (USA) INC.

## TANK LOCATION

CEDAR BENCH 6311 (C28 6100)  
SECTION 28, T6S, R100W, 6th P.M.  
1198' FNL 2085' FWL

FIGURE #1A

SCALE: 1" = 50'  
DATE: 05-11-10  
DRAWN BY: D.R.B.  
Rev: 06-28-10 D.R.B.

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

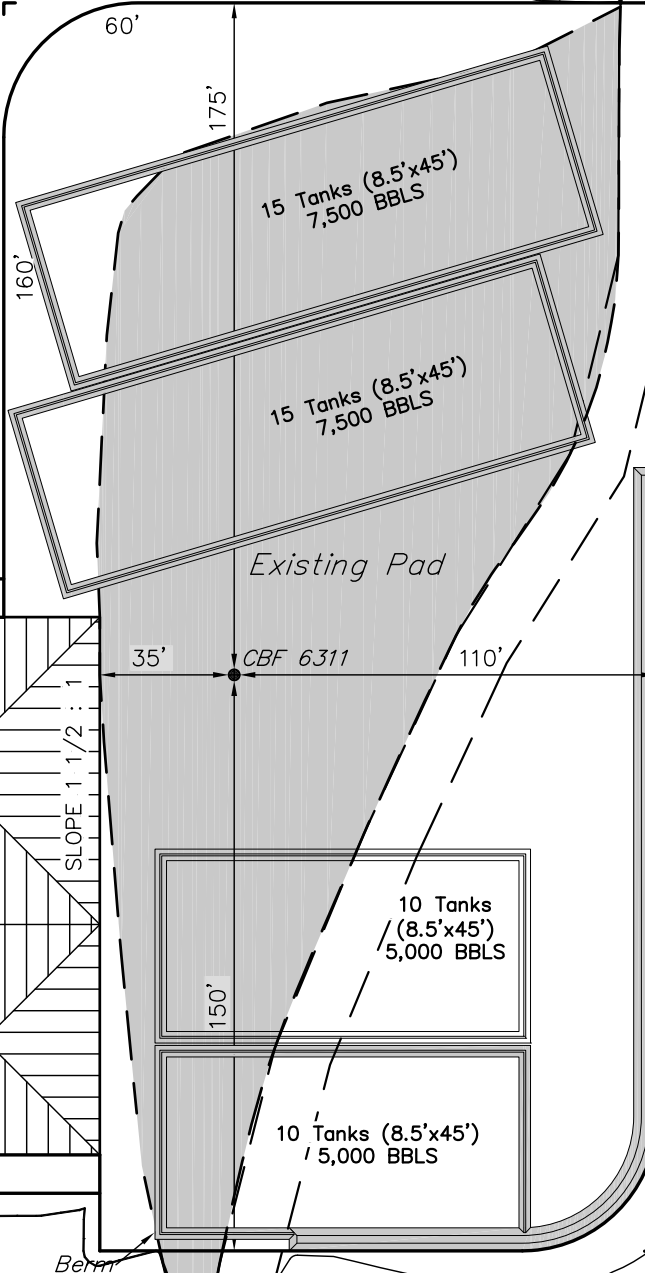
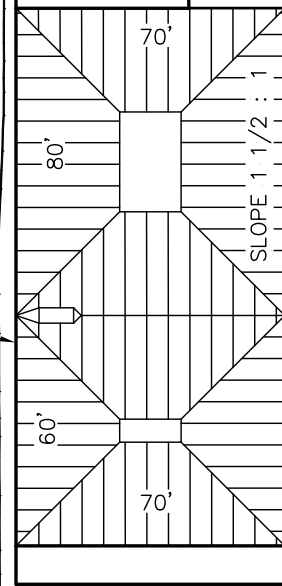
Access Road



Total Pit Capacity  
= 10,210 Bbls.±  
Total Pit Volume  
= 2,790 Cu. Yds

RESERVE PITS  
(18' Deep)

FLARE PIT





# EnCana OIL & GAS (USA) INC.

FIGURE #2

## CONSTRUCTION LAYOUT CROSS SECTION FOR

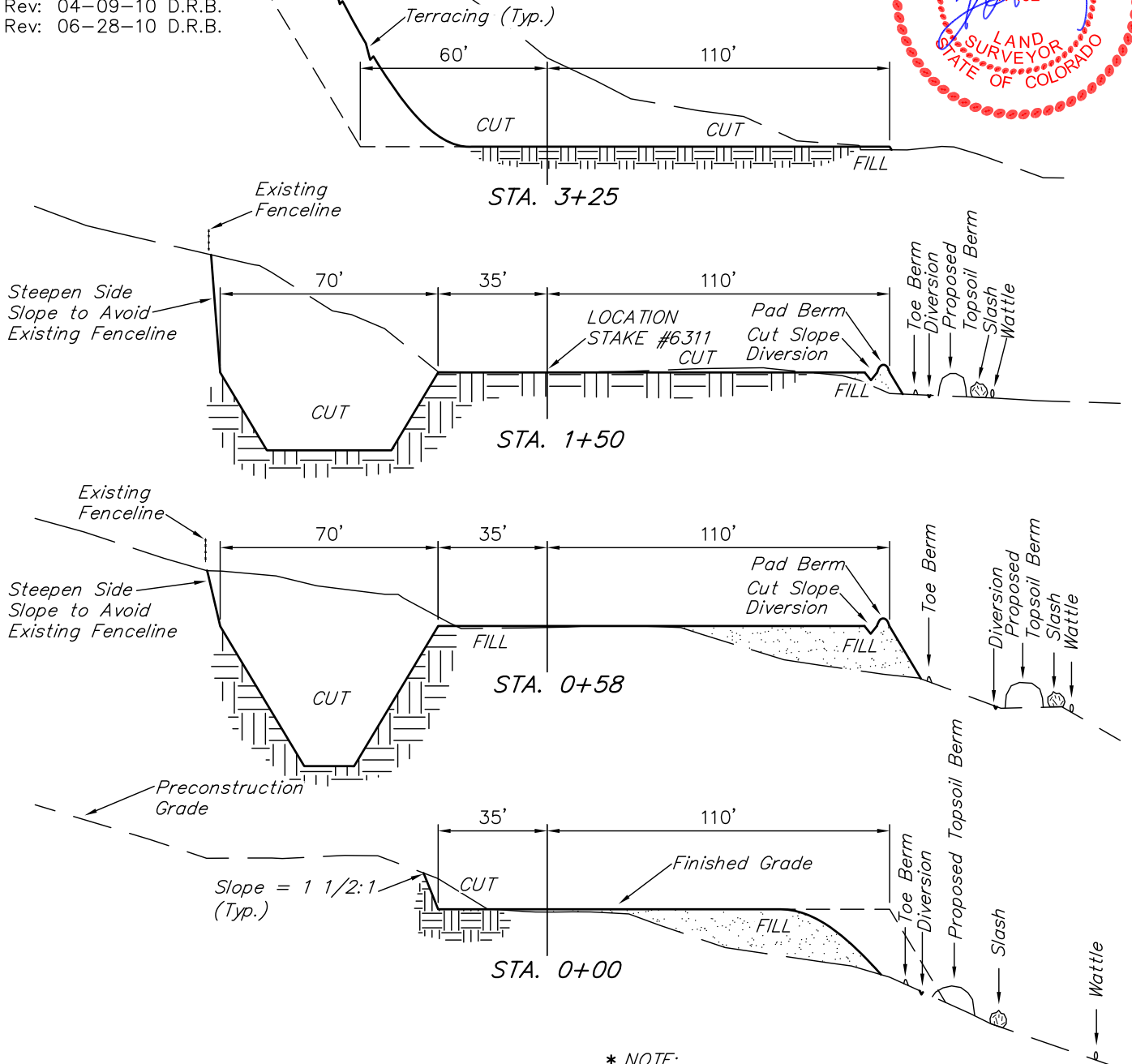
CEDAR BENCH 6311 (C28 6100)

SECTION 28, T6S, R100W, 6th P.M.

1198' FNL 2085' FWL

Proposed  
Topsoil Berm  
X-Section  
Scale  
1" = 50'

DATE: 03-05-10  
DRAWN BY: D.R.B.  
Rev: 04-09-10 D.R.B.  
Rev: 06-28-10 D.R.B.



\* NOTE:  
FILL QUANTITY INCLUDES  
5% FOR COMPACTION

### APPROXIMATE YARDAGES

(6") Topsoil Stripping	=	890 Cu. Yds.
(New Construction Only)		
Remaining Location	=	10,450 Cu. Yds.
<b>TOTAL CUT</b>	<b>=</b>	<b>11,340 CU.YDS.</b>
<b>FILL</b>	<b>=</b>	<b>1,780 CU.YDS.</b>

EXCESS MATERIAL	=	9,560 Cu. Yds.
Topsoil & Pit Backfill (1/2 Pit Vol.)	=	2,290 Cu. Yds.
EXCESS UNBALANCE (After Interim Rehabilitation)	=	7,270 Cu. Yds.

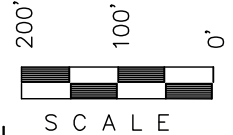
UINTAH ENGINEERING & LAND SURVEYING  
85 So. 200 East \* Vernal, Utah 84078 \* (435) 789-1017

# EnCana OIL & GAS (USA) INC.

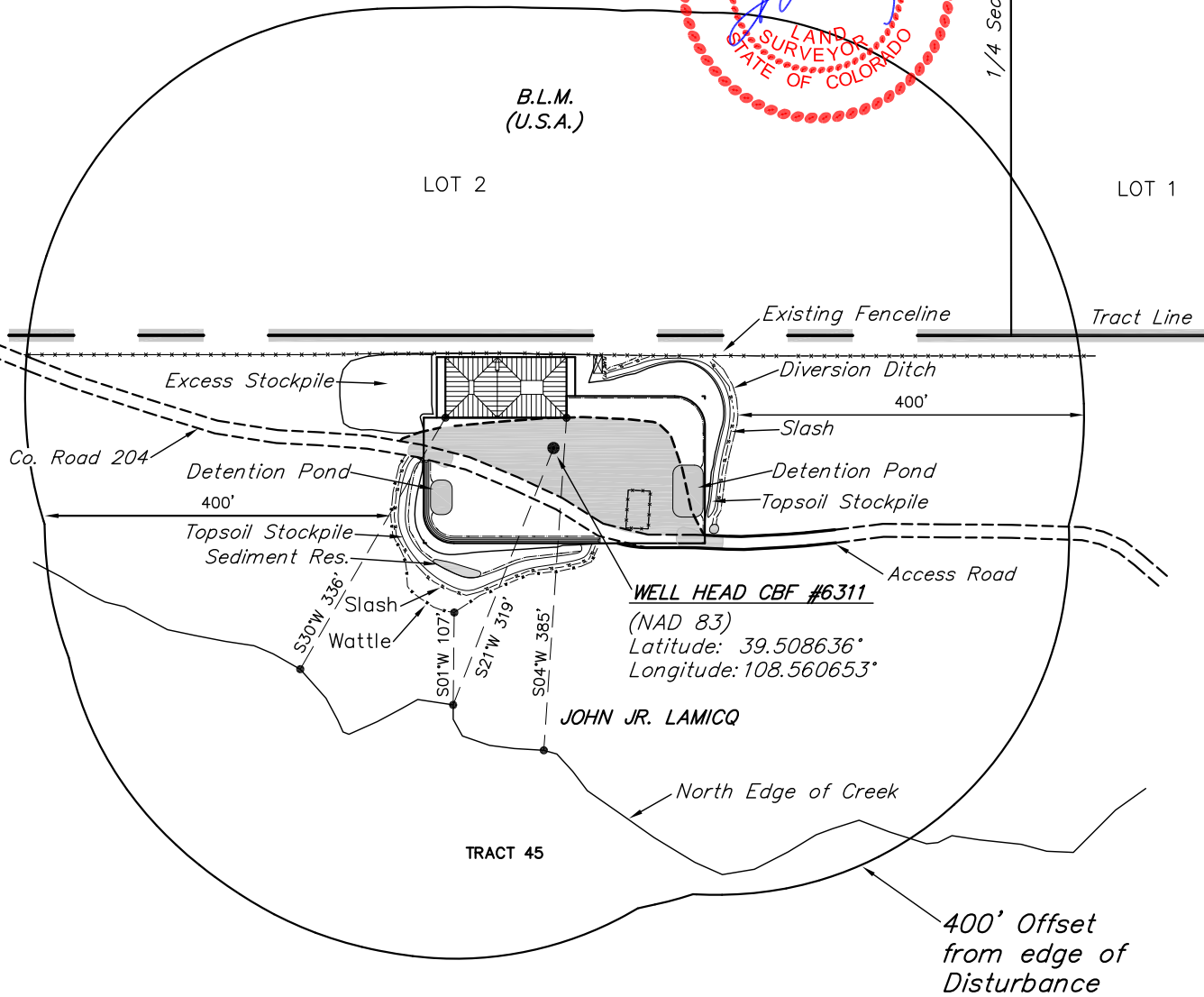
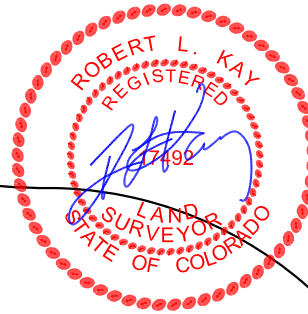
## LOCATION DRAWING FOR

CEDAR BENCH 6311 (C28 6100)  
SECTION 28, T6S, R100W, 6th P.M.  
1198' FNL 2085' FWL

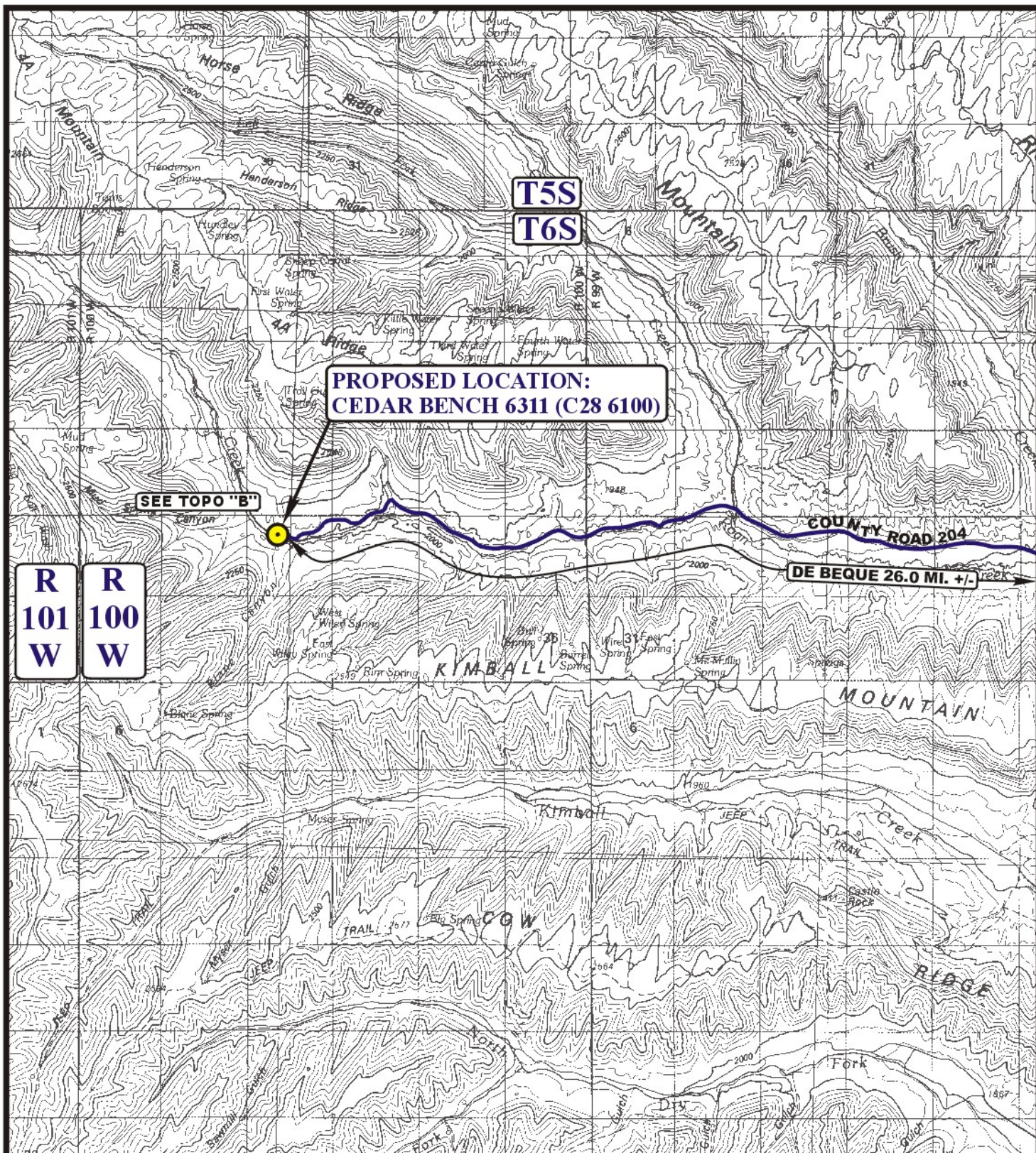
FIGURE #3



SCALE: 1" = 200'  
DATE: 05-11-10  
DRAWN BY: D.R.B.  
Rev: 06-28-10 D.R.B.







# **LEGEND:**

 **PROPOSED LOCATION**



**EnCana OIL & GAS (USA) INC.**

**CEDAR BENCH 6311 (C28 6100)**  
**SECTION 28, T6S, R100W, 6th P.M.**  
**1198' FNL 2085' FWL**



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

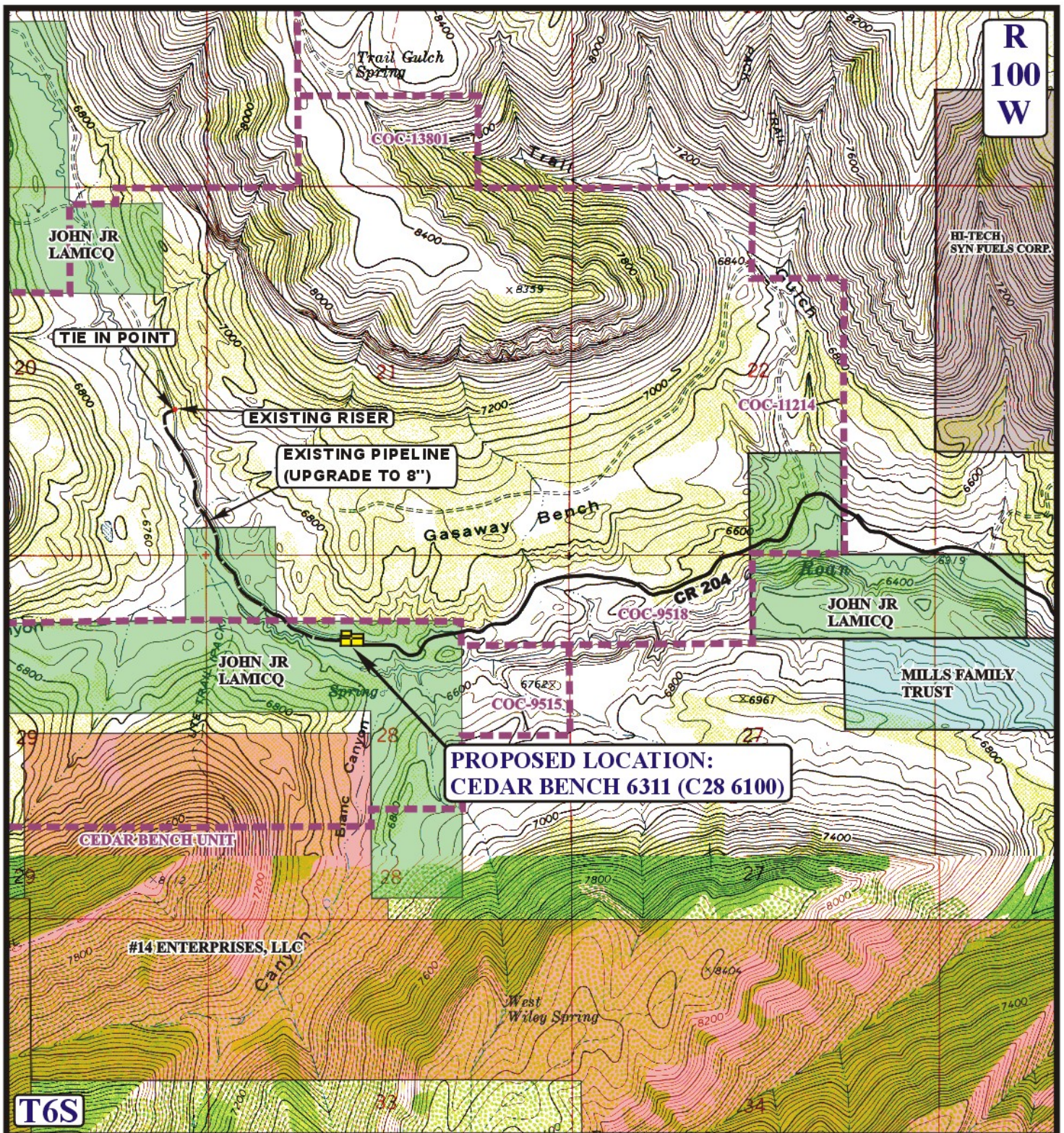
**TOPOGRAPHIC**  
**MAP**

**11 11 02**  
 MONTH DAY YEAR



SCALE: 1:100,000 DRAWN BY: P.M. REV: 3-9-10J.L.G.





APPROXIMATE TOTAL 8" PIPELINE UPGRADE DISTANCE = 4,940' +/-

#### LEGEND:

- EXISTING PIPELINE
- EXISTING ROAD



EnCana OIL & GAS (USA) INC.

**CEDAR BENCH 6311 (C28 6100)**  
**SECTION 28, T6S, R100W, 6th P.M.**  
**1198' FNL 2085' FWL**



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

**PIPELINE  
MAP**

**11 11 02**  
 MONTH DAY YEAR

SCALE: 1" = 2000'

DRAWN BY: P.M.

REV: 5-17-10 J.L.G.

**D  
TOPO**



EnCana OIL & GAS (USA) INC.  
CEDAR BENCH 6311 (C28 6100)  
SECTION 28, T6S, R100W, 6<sup>th</sup> P.M.

PROCEED IN A NORTHWESTERLY DIRECTION FROM DE BEQUE, COLORADO ALONG THE ROAN CREEK ROAD APPROXIMATELY 9.9 MILES TO THE JUNCTION OF THE ROAN CREEK ROAD AND COUNTY ROAD 204 TO THE NORTHWEST; PROCEED IN A NORTHWESTERLY DIRECTION APPROXIMATELY 2.7 MILES TO THE JUNCTION OF COUNTY ROAD 204 AND AN EXISTING ROAD TO THE WEST; TURN LEFT AND PROCEED IN A WESTERLY DIRECTION APPROXIMATELY 13.4 MILES TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM DE BEQUE, COLORADO TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 26.0 MILES.