```
STATE OF LOUISIANA
                                                                             $1264
                                                                      FEE.
                               OFFICE OF CONSERVATION
                    APPLICATION FOR PERMIT TO DRILL FOR MINERALS
                          Approval Date 08/09/2011
SERIAL NO. 243657
                         Expiration Date 02/04/2012
API 17081213520000
                                                                      HORIZONTAL
         41 PARISH
                       RED RIVER
       9803 FIELD
                       WOODARDVILLE
       E165 OPERATOR
                       ENCANA OIL & GAS (USA) INC.
                                                                      SHREVEPORT DISTRICT
                       14001 N. DALLAS PARKWAY
                       STE, 1000
                       DALLAS, TX 75240-0000
                                                        NO. 001-ALT
WELL NAME: HA RA SU55;O B MADDEN 7-18 HC
LOCATION OF WELL: SEC 007 T 14N R 10W M W
                  2122' FSL & 1060' FWL OF SEC 7. PBHL: 440' FWL & 330' FSL OF SEC 18.
ZONE OR RESERVOIR OF PROPOSED COMPLETION: HAYNESVILLE
                                True Vertical Depth 12000
 Measured Depth 22000
```

JAMES H. WELSH COMMISSIONER OF CONSERVATION **BATON ROUGE OFFICE**

APPLICABLE OFFICE OF CONSERVATION ORDERS: 29B-1

ISSUING AUTHORITY

JEFF WELLS

STATE OF LOUISIANA OFFICE OF CONSERVATION FORM MD-10-R-1 APPLICATION FOR PERMIT TO DRILL FOR MINERALS

TYPE ONLY - FILE IN DUPLICATE

OFFICE VIOLENCE	(Print on Buff col	lor paper)		
OFFICE USE ONLY	29 B.1, ccs1 Hiriz		OFFICE USE ONLY	
, , , , , , , , , , , , , , , , , , , ,	cq 6-1, (2.37)	SERIAL NUMBER:	<u> </u>	457
Company Data	г	DATE OF APPLICATION.	· · · ·	
OPERATOR: EnCana Oil &		DATE OF APPLICATION: <u>08/0</u>		· -·
			CODE NO.	E165
ADDRESS: 14001 N Dal	· · · · · · · · · · · · · · · · · · ·			
Dallas, TX 7	5240			
Well Data		***************************************	•••••••	
PARISH: <u>RED RIVER</u>			CODE NO	41
FIELD: WOODARDVILLE			CODE NO.	9803
WELL NAME: HA RA SUS	5; O B MADDEN 7-18HC	·····	Well No.:	001-ALT
LOCATION: Section: 7	7 Township: 14N Ra	ange: 10W		
SL: 2122'FS PROP BHL:	L & 1060' FWL OF S7, T14N, R10' 440' FWL & 330' FSL OF S18, T14	W N, R10W TYPE OF WE	-11	
PRODUCT: OIL	X GAS OTHER	X		
Proposed Total Depth. 2		——————————————————————————————————————		!à
(and TVD, if applicable) 1		`	——————————————————————————————————————	ermit zontal
Application Fee: 12		·		
6 Month X	1 Year	Straig		ctional
PROPOSED ZONE OF C APPLICABLE CONSERV SERIAL NUMBER OF RE	311111400	D-55 EFF 3/22/11		
CONTACT DATA				••••••
SEND PERMIT TO:	Sharon Cook	RECEIVE		
ADDRESS: (if different than above)				
FOR ADDITIONAL INFORMATION, CONTACT:		- /8°G 0 ° 2011		
Phone No.:	(214)987-7174	OFFICE OF CONSERVA	TION	
APPLICANT	(214)701-11/4	FERMIT RECTION		
SUBMITTED BY: SI	naron Cook Regulatory Advisor		H	
SIGNATURE: _	Shar Correction of the Pricant's Representative Signature		3	RVAT EA:
OFFICE USE ONLY	one we did not be a second of the second of	 	OF	FICESUSE ONLY
FINANCIAL SECURITY REQUIRE	ED PRIOR TO PERMITTING:	Yes 📈 No		2007
DISTRICT APPROVAL:		APAM/ DAT	8-3-1	
ISSUED BY:	10001211	DAT WILL DAT	E: <u>8/9/11 &</u>	5
API No.:	1708/2/352	Exp	D.: 2-4-	12
			FORM MD-10-	-R-1 (Rev 08/2009)

STATE OF LOUISIANA OFFICE OF CONSERVATION

August 3, 2011

TO: Baton Rouge Office

FROM: Shreveport District Office

ATTN: Permit Section

Enclosed herewith please find application from $\underline{\text{ENCANA OIL \& GAS}}$ (USA) INC. (E165) DALLAS, TX for permit to $\underline{\text{DRILL}}$

their HA RA SU55; O B MADDEN 7-18-HC # 1-ALT

WOODARDVILLE field, RED RIVER Parish.

Also enclosed please find: Invoice Number $\frac{589147}{$1264.00}$ Check No. $\frac{717355}{}$ in the amount of $\frac{$1264.00}{}$

XX Well location plat
XX Well location certification

Packer setting certification
Packer leakage certification
Form ADC
Electric Log
Schematic diagram

Applicable Office of Conservation Order Nos. 29-B; 990-D-55

Remarks & Recommendations:

*This is a Cross Unit horizontal well.

- *Complies with 990-D-55, effective 03/22/11.
- *Well spacing set in 990-D at 330'/660'.
- *Order No. 990-D-55 requires cross unit lateral be perforated no closer than 330^{\prime} from unit boundary they are designated to serve as an alternate unit well.

RECEIVED

AUG 0 4 2011

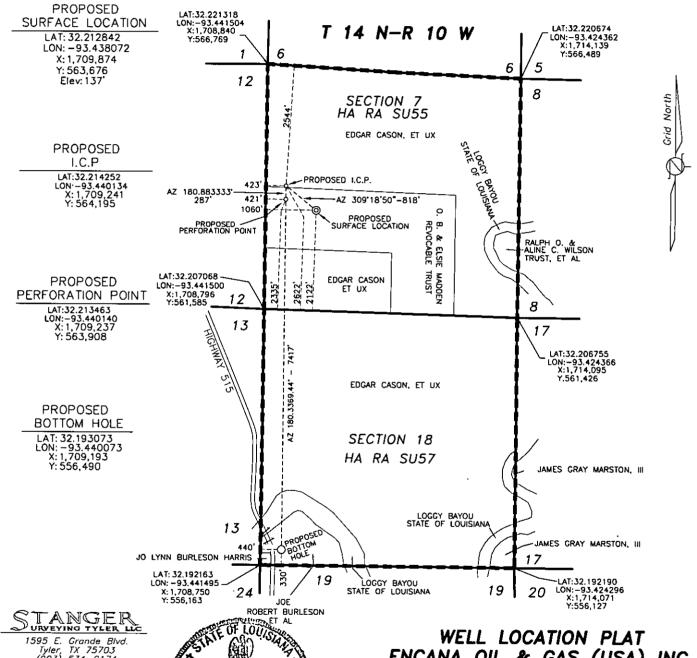
OFFICE OF CONSERVATION PERMIT SECTION

District Engineer

EnCana Oil & Gas USA, Inc. **Well Summary** Well Name: HA RA SU55; O B MADDEN 7-18HC-1 ALT : Red River Parish, Louisiana Area Rig: Field : Woodardville Elevation: 137' API No. : TBD KB: : S7-T14N-R10W, 2122' FSL & 1060' FWL SL Permit Formation Tops Depth TVD Hole Size 13-1/2" **Tubular Detail** Weight Size Grade Cxn Τо **Surface Casing** 1850' Conductor 16" 80' 9-7/8" Surface 10-3/4" 40.5# J-55 STC 1,850 Intermediate 7-5/8" 33.7# P-110 LTÇ 2,000' 7-5/8" 29.7# P-110 LTC 2,000 10,700 Vam Production 5" 23.2# T-95É 6,500 0' Тор Vam 23.2# P-110 6,500 10,000' 5" 23.2# P-110 SFC 10,000' 22,000 Fresh water spud mud to 5,000' New Lig / New Flow / New Pac LV below (LSND) Intermediate Hole PV / YP Depth Density FL HTHP FL Solids % TOC at 9,000' (7-5/8") TOC at 9,000" (5") **Production Hote** OptiDrill (OBM) below ICP PV / YP HTHP FL Solids % pН Inter, Casing 10,700 6-1/2" **Directional Plan** MD TVD ınç azi. vs DLS TD 12,000' 22,000

243657

Notes: All Bearings, Distances, and Coordinates shown hereon are based on the Louisiana State Plane Coordinate System, NAD. 27 Datum, North Zone There are no Residential or Commercial Structures within 500' of Proposed Location. Proposed SURFACE Location is located 2122 feet from the south line and 1060 feet from the West line of Section 7, Township 14 North — Range 10 West, Red River Parish, Louisiana. Proposed BOTTOM HOLE Location is located 440 feet from the West line and 330 feet from the South line of Section 18, Township 14 North — Range 10 West, Red River Parish, Louisiana. Proposed PERFORATION POINT is located 2335 feet from the South line and 421 feet from the West line of Section 7, Township 14 North — Range 10 West, Red River Parish, Louisiana Proposed I.C.P is located 2544 feet from the North line and 423 feet from the West line of Section 7, Township 14 North — Range 10 West, Red River Parish, Louisiana.



1595 E. Grande Blvd.
Tyler, TX 75703
(903) 534-0174

I, John R. Nowlin, Registered Professional Conveyor, do hereby certify that the above pincessing, 4501 and correct to the best of mysknowledge.STENED
PROFESSIONAL

Registered Professional Land Surveyor No 4801 State of Louisiana

7-27-2011

WELL LOCATION PLAT
ENCANA OIL & GAS (USA) INC.
HA RA SU55; O B MADDEN 7-18HC-1 ALT
RED RIVER PARISH, LOUISIANA
SCALE: 1" = 2000'

THIS WELL IS NOT SUBJECT TO THE PROVISIONS OF ORDER U-HS

T101107-LOC-7-18-1 ALT-RR