STATE OF LOUISIANA OFFICE OF CONSERVATION APPLICATION FOR PERMIT TO DRILL FOR MINERALS Approval Date 10/24/2011 **SERIAL NO. 244006** API 17081213720000 Expiration Date 04/20/2012 41 PARISH **RED RIVER** LIBERTY 5955 FIELD E165 OPERATOR ENCANA OIL & GAS (USA) INC. 14001 N. DALLAS PARKWAY

HORIZONTAL

FEE. \$1264

SHREVEPORT DISTRICT

STE, 1000 **DALLAS, TX 75240-0000** WELL NAME: HA RA SUI:WKP PROPERTIES 12 H LOCATION OF WELL: SEC 011 T 12N R 09W M W 380' FSL &380' FEL OF SEC. 11. PBHL: 330' FNL & 440' FWL OF SEC 12.

NO. 001

ZONE OR RESERVOIR OF PROPOSED COMPLETION: HAYNESVILLE

True Vertical Depth 12000

APPLICABLE OFFICE OF CONSERVATION ORDERS: 29B-1

JAMES H. WELSH

JEFF WELLS

Measured Depth 20000

ISSUING AUTHORITY

COMMISSIONER OF CONSERVATION

BATON ROUGE OFFICE

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

TYPE ONLY - FILE IN DUPLICATE

			(Print or	Buff color paper)				
OFFICE USE ONLY	1, 293.1	, cc51	Horiz		SERIAL N	NUMBER:	244	FFICE USE ONLY
Company Data		DATE OF APPLICATION: 10/17/2011						
OPERATOR:	EnCana Oil	<u>& Gas (USA) 1</u>	Inc			10/.1	CODE NO	E165
		llas Parkway; S				· · · · · · · · · · · · · · · · · · ·	CODE NO	E103
ABBRESS.			STE 1000					
	Dallas, TX	<u> 15240 </u>						
Well Data			*****************	**************	***************************************			
	RED RIVER	<u>k</u>					CODE NO.	41
FIELD:	LIBERTY		······································		•		CODE NO.	5955_
WELL NAME:	HA RA SUI;	WKP PROPE	ERTIES 12H		· · · · · · · · · · · · · · · · · · ·		Well No.:	001
LOCATION:	Section:	11 Tow	vnship: 12N	Range 9)W			
	SL: 380' FSI PROP BHL:	2 & 380' FEL (330' FNL & 4	OF S11, T12N, 140' FWL OF S	R9W 12, T12N, R9V	N	Type of w		
PRODUCT:	OIL	X GAS		HER		X New		
'	ed Total Depth: 2		feet - Measu					
	D, if applicable) 1			ertical Depth		Redri		ermit
	cation Fee: 1		reet - True v Check No.;	•		Dual		izontal
	fonth 🗡	1 Year	CIIECK NO.,	<u>747481</u>		Lease		ctional
APPLICAB	LE CONSER	COMPLETION VATION ORDI EDRILL OR R		AYNESVILLE B; 1407-C pplicable):		13-09		
CONTACT DATA			••••••••••					
SEND PERMIT TO: ADDRESS:		Sharon Co	ok	RE	CEI	/ED	REC	EIVE
(if different than above)							UCT	1 9 2011
FOR ADDITIONAL INFORMATION, CONTACT:				0	CT 2 4 Z	ווט		CONSERVATIO
SHREVEPORT, LA.								
APPLICANT	Frione No	<u>(214)987-7</u>	/1/4	OFFICE PE	OF CONSI PMIT-SEQ	TION		
SUBM		Sharon Cook R	Regulatory Advi					
Sie	GNATURE:	PLICANT'S REPRESE	ENTATIVE SIGNATURE					
OFFICE USE ONLY							OF	FICE USE ONLY
		RED PRIOR TO P	ERMITTING.	Yes	NO K			_
DISTRICT APPROVAL: _				- J	2 MMM	DA	E: <u>16 - 1</u>	19-11
IS	SUED BY:			1	Welle	DA	TE: 10/29	///
	API No.: _		1708	12137	2	E>	p.: <u>4/20</u>	//12
			•				FORM MD-10	0-R 1 (Rev 08/2009)

STATE OF LOUISIANA OFFICE OF CONSERVATION

OCTOBER 20, 2011

TO: Baton Rouge Office

FROM: Shreveport District Office

ATTN: Permit Section

Enclosed please find an application from ENCANA OIL & GAS (USA) INC (E165)

DALLAS, TX for permit to DRILL their HARA SUI; WKP PROPERTIES 12 H #1

<u>LIBFRTY</u> field, <u>RED RIVER</u> Parish.

Also enclosed please find: Invoice Number ___598336__

Check No. 747481 in the amount of \$ 1264.00

X Well location plat

X Well location certification

Applicable Office of Conservation Order No. 29-B; 1407-C

Remarks & Recommendations:

RECEIVED

- ❖ Complies with 1407-C effective 01/13/09.
- ❖ Well spacing set in 1407-C at 330'/660'.
- ❖ No well ever permitted/drilled to HA RA SUI.
- ❖ Comply with 29-B & 1407-C.

OCT 2 4 2011

OFFICE OF CONSERVATION PERMIT SECTION

District Engineer

EnCana Oil & Gas USA, Inc. **Well Summary** Well Name : HA RA SUI; WKP Properties 12H-1 : Red River Parish, Louisiana Area Field : Liberty Field Elevation: 211' API No. : TBD SL : S11-T12N-R9W, 380' FSL & 380' FEL Permit Formation Tops Depth TVD Hole Size 13-1/2" **Tubular Detail** Weight Grade Cxn From Size To Surface Casing 2000 Conductor 16" 80' 9-7/8" Surface 10-3/4" 40.5# J-55 STC 2,000 Intermediate 33.7# P-110 LTC 0' 2,000 7-5/8" 29 7# P-110 LTC 2,000 10,700 Vam Production 23.2# T-95E 0' 6,500 Тор Vam 23.2# P-110 6,500 10,000 Тор 23.2# P-110 10,000' SFC 20,000 Fresh water spud mud to 5,000' New Lig / New Flow / New Pac LV below (LSND) Depth Density PV / YP FL HTHP FL ρН Solids % TOC at 9,000' (7-5/8") TOC at 9,000' (5") OptiOnII (OBM) below ICP PV/YP HTHP FL Density Depth FL pН Solids % Inter. Casing 10,700 6-1/5" **Directional Plan** MD TVD azi. VS DLS inc TD 20,000 12,000 RECEIVED OCT 19 2011 OFFICE OF CONSERVATION SHREVEPORT, LA

