



STATE OF LOUISIANA  
OFFICE OF CONSERVATION  
PERMIT TO DRILL FOR MINERALS

FEE: \$1264

SERIAL NO. 243123

Approval Date 04/18/2011

API 17017350420000

Expiration Date 10/14/2011

09 PARISH CADDO  
4313 FIELD GREENWOOD-WASKOM  
C084 OPERATOR CHESAPEAKE OPERATING, INC.  
333 TEXAS STREET  
SUITE 1100  
SHREVEPORT, LA 71101-0000

HORIZONTAL

SHREVEPORT DISTRICT

WELL NAME: HA RA SU90,WAITS 33- 17- 15 H

NO. 001

LOCATION OF WELL: SEC 033 T 17N R 15W M W

832' FSL & 1730' FWL OF SEC 33. PBHL: 250' FNL & 1650' FWL OF SEC 33.

ZONE OR RESERVOIR OF PROPOSED COMPLETION: HAYNESVILLE

Measured Dept 17600

True Vertical Depth 11800

APPLICABLE OFFICE OF CONSERVATION ORDERS: 29B- 1

JAMES H. WELSH

JEFF WELLS

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COMMISSIONER OF CONSERVATION

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ISSUING AUTHORITY

WELL FILE



**BOBBY JINDAL**  
GOVERNOR

**State of Louisiana**  
**DEPARTMENT OF NATURAL RESOURCES**  
**OFFICE OF CONSERVATION**

**SCOTT A. ANGELLE**  
SECRETARY

**JAMES H. WELSH**  
COMMISSIONER OF CONSERVATION

APRIL 19, 2011

CHESAPEAKE OPERATING, INC.  
333 TEXAS STREET  
SUITE 1100  
SHREVEPORT, LA 71101-0000

\*\*\* PERMIT TO DRILL \*\*\*

RE. CADDO PARISH  
GREENWOOD-WASKOM FIELD  
HA RA SU90, WAITS 33-17-15 H NO. 001  
SER NO. 243123

GENTLEMEN,

WE ARE ISSUING THE ATTACHED PERMIT TO DRILL FOR THE ABOVE REFERENCED WELL WITH THE UNDERSTANDING THAT YOU WILL COMPLY WITH THE FOLLOWING CONDITIONS:

FURNISH THE APPROPRIATE DISTRICT MANAGER WITH A DIRECTIONAL SURVEY AS PROOF THAT THE WELL HAS BEEN DRILLED IN COMPLIANCE WITH THE PROVISIONS OF LAC 43.XIX 135.C (STATEWIDE ORDER NO. 29-B)

NO ALLOWABLE WILL BE ASSIGNED SAID WELL UNLESS IN COMPLIANCE WITH THE ABOVE PROVISIONS.

PLEASE BE ADVISED THAT A PERMIT TO DRILL ISSUED BY THE OFFICE OF CONSERVATION DOES NOT RELIEVE THE OPERATOR OF THE OBLIGATION TO COMPLY WITH FEDERAL, LOCAL, OR OTHER STATE PERMITTING OR REGULATORY REQUIREMENTS.

YOURS TRULY,

JAMES H. WELSH  
COMMISSIONER OF CONSERVATION

JEFF WELLS

JW : DP  
CC. JAMES BROUSSARD  
SHREVEPORT, DISTRICT MANAGER  
29B-1

STATE OF LOUISIANA OFFICE OF CONSERVATION  
APPLICATION FOR PERMIT TO DRILL FOR MINERALS

243123

TYPE ONLY

SERIAL NO 243123 DATE 04/13/2011  
PARISH Caddo  
FIELD Greenwood-Waskom  
OPERATOR Chesapeake Operating, Inc.  
ADDRESS 333 Texas Street, Suite 1100  
CITY Shreveport STATE LA ZIP 71101  
WELL NAME HA RA SU90; Waits 33-17-15 H No. 001  
LOCATION: Sec. 033 T 17N R 15W SL: 832' FSL & 1730' FWL of Section 33.  
PBHL: 250' FNL & 1650' FWL of Section 33.

CODE NUMBERS

09

4313

C084

APPLICATION FOR OIL ☐ GAS: ☒ OTHER: ☐ PROPOSED TOTAL DEPTH  
and TVD, if applicable 17600' MD / 11800' TVD

ZONE or RESERVOIR OF PROPOSED COMPLETION Haynesville RA

APPLICABLE CONSERVATION ORDERS 29B, 270-MM-59 eff date 11-30-10

SEND PERMIT TO: Sara Loftin

FOR ADDITIONAL INFORMATION, CONTACT Sara Loftin Phone No: (318)674-7214

BY

DISTRICT APPROVAL

ISSUED BY

API No (OC USE ONLY)

Kathleen Hiraud

1701735042

Exp

10-14-11

APPLICANT'S SIGNATURE

DATE

1-15-11

DATE

4-18-11

RECEIVED SECTION

APR 18 2011

RECEIVED

RECEIVED

APR 14 2011

OFFICE OF CONSERVATION  
SHREVEPORT, LA

STATE OF LOUISIANA  
OFFICE OF CONSERVATION

April 15, 2011

TO: Baton Rouge Office  
FROM: Shreveport District Office  
ATTN: Permit Section

Enclosed herewith please find application from Chesapeake Operating Inc (C084) Shreveport, LA for permit to drill

their HA RA SU90; Waits33-17-15H #1

Greenwood - W/Kom field, DeCade Caddo Parish.  
~~Grogan~~

Also enclosed please find: Invoice Number 577146  
Check No. 2909 in the amount of \$1264.00.

XX Well location plat  
XX Well location certification  
         Packer setting certification  
         Packer leakage certification  
         Form ADC  
         Electric Log  
         Schematic diagram

*No Bond*  
*CC 51*  
*29B-1*

Applicable Office of Conservation Order Nos. 270-MM-59.

Remarks & Recommendations:

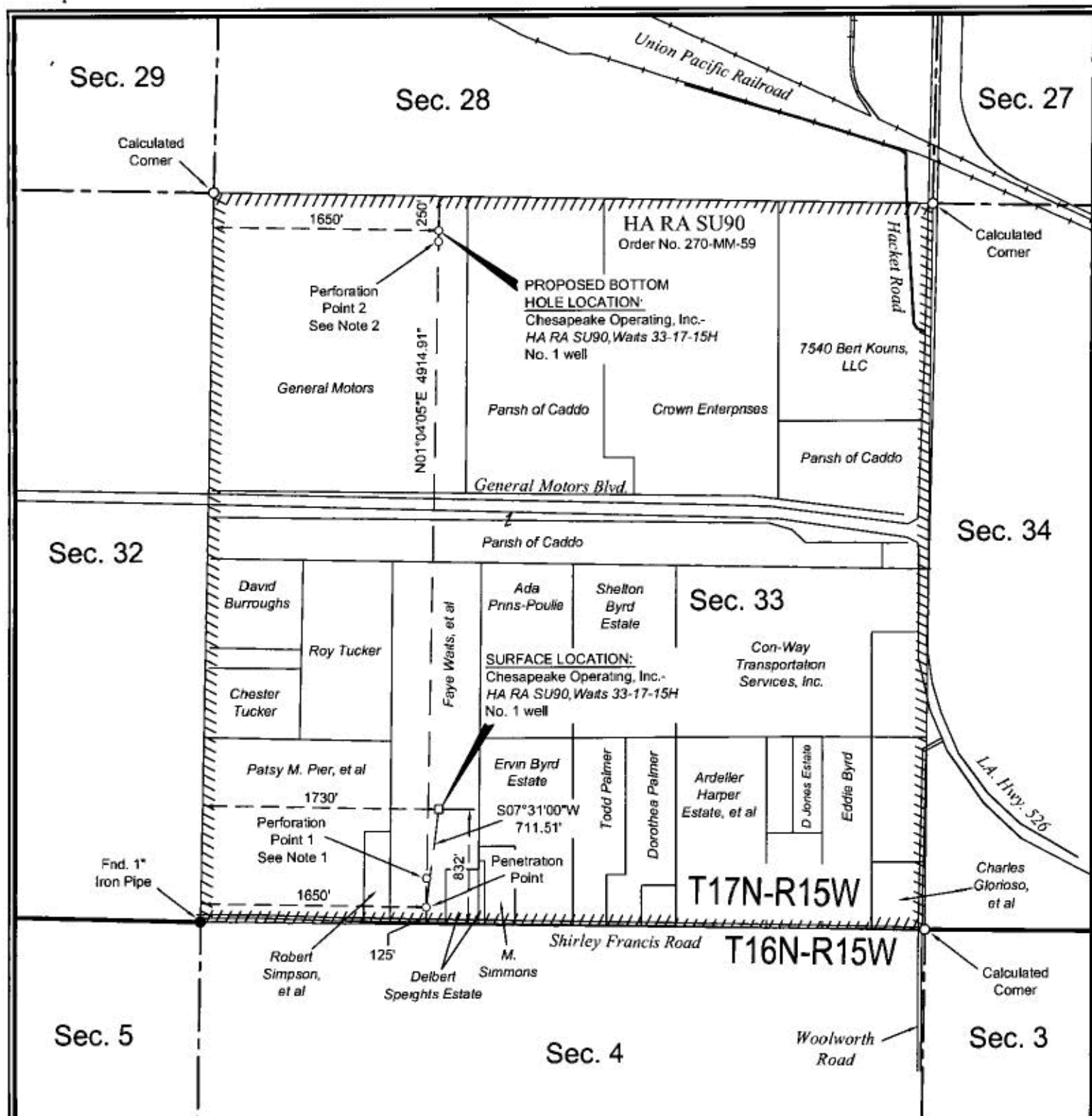
- \*Complies with 270-MM-59 effective 11/30/10.
- \*Well spacing set in 270-MM-2 at 330'/660'.
- \*No well ever permitted/drilled to HA RA SU90.
- \*Comply with 29-B.

BY: \_\_\_\_\_  
District Engineer

RECEIVED

APR 18 2011

OFFICE OF CONSERVATION  
PERMIT SECTION

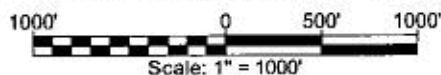


SURFACE LOCATION		PROPOSED BOTTOM HOLE LOCATION	
X=	1,564,431 NAD 27	X=	1,564,430 NAD 27
Y=	638,994	Y=	643,202
LAT.	32.415534 N	LAT.	32.427102 N
LONG.	93.911466 W	LONG.	93.911649 W
X=	2,845,218 NAD83	X=	2,845,217 NAD83
Y=	699,703	Y=	703,912
LAT.	32.415690 N	LAT.	32.427257 N
LONG.	93.911649 W	LONG.	93.911831 W

Chesapeake Operating, Inc.-  
HA RA SU90; Waits 33-17-15H No. 1 Well  
Prepared March 17, 2011 as follows:  
SURFACE LOCATION being 832' from the South Line and 1730' from the West Line of Section 33, located in Section 33, T17N-R15W. PROPOSED BOTTOM HOLE LOCATION to be 250' from the North Line and 1650' from the West Line of Section 33, located in Section 33, T17N-R15W, Caddo Parish, Louisiana.

Note: This well is not subject to the provisions of Order U-HS.

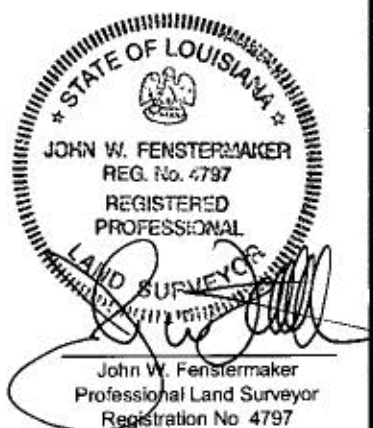
No residential or commercial structures exist within a 500' radius of the proposed well location on March 17, 2011.  
Elevation of ground at location +229' NAVD 88.



	NAD 27
PENETRATION POINT	X=1,564,338 Y= 638,288
PERFORATION POINT 1	X=1,564,342 Y= 638,493
PERFORATION POINT 2	X=1,564,428 Y= 643,122

NOTE 1. Perforation Point to be no closer than 330' from the South Line of Section 33.

NOTE 2. Perforation Point to be no closer than 330' from the North Line of Section 33.



## CHESAPEAKE OPERATING, INC.

HA RA SU90; Waits 33-17-15H No. 1 Well  
Section 33, T17N-R15W  
Caddo Parish, Louisiana

DRAWN BY: MKC	REVISIONS
PROJ. MGR.: JWF	
DATE: March 17, 2010	
FILENAME: T:\2010\2108393\DWG\Waits33-17-15#1-LOC.dwg	



135 Regency Sq. Lafayette, LA 70508  
Ph. 337-237-2200 Fax. 337-237-3299  
www.fenstermaker.com