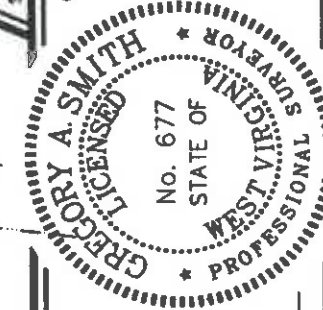
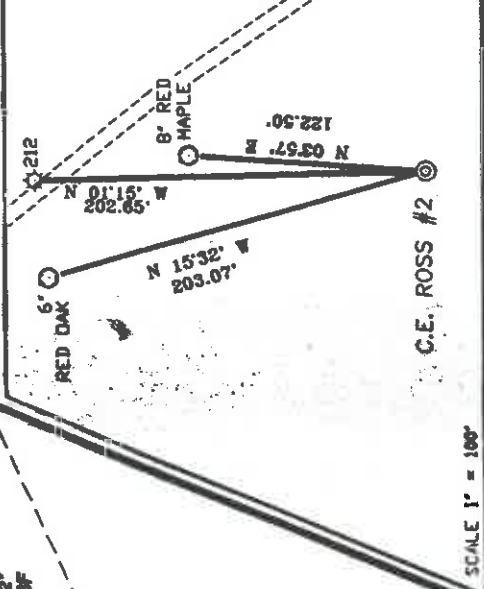


550  
177.0

**REFERENCES**



I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENERGY.

P.S. 677  
*Gregory A. Smith*

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.

DATE DECEMBER 10, 19 97  
OPERATORS WELL NO. C.E. ROSS # 2  
API WELL NO. 47-017 COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 200 FILE NO. 3849P2 (64-53)  
PROVEN SOURCE OF ELEVATION JUNCTION OF ROADS ELEVATION 892' SCALE 1" = 400'

WELL TYPE : OIL  GAS  INJECTION  WASTE DISPOSAL  IF "GAS" PRODUCTION  STORAGE  DEEP  SHALLOW

LOCATION : ELEVATION 906' WATERSHED TRIBUTARY OF CABIN RUN

DISTRICT CENTRAL COUNTY DODDRIDGE QUADRANGLE PULLMAN 7.5'

SURFACE OWNER JOHN K. DeBRULAR ET.AL. ACREAGE 60

ROYALTY OWNER H.B. & NELLIE DAVIS H&W JTOS ET.AL. LEASE ACREAGE 60

PROPOSED WORK : LEASE NO. \_\_\_\_\_

DRILL  CONVERT  DRILL DEEPER  REDRILL  FRACTURE OR STIMULATE  PLUG OFF OLD

FORMATION  PERFORATE NEW FORMATION  PLUG AND ABANDON  CLEAN OUT AND REPLUG  OTHER

PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_ TARGET FORMATION ALEXANDER

WELL OPERATOR KEY OIL COMPANY DESIGNATED AGENT JAN CHAPMAN ESTIMATED DEPTH 5600'

ADDRESS 22 GARTON PLAZA, WESTON, WV 26452 COUNTY NAME \_\_\_\_\_ PERMIT \_\_\_\_\_

6-1-89





WR-35

29 - Dec - 97  
API # 47 - 17 - 04420

State of West Virginia  
Division of Environmental Protection  
Section of Oil and Gas

Well Operator's Report of Well Work

Farm name: DEBRULAR, C.P. HEIRS

Operator Well No. : C.E. ROSS #2

LOCATION: Elevation: 906.00

Quadrangle: OXFORD

District: CENTRAL  
Latitude: 6610 Feet South of 39 Deg. 15 Min. 0 Sec.  
Longitude: 680 Feet West of 80 Deg. 52 Min. 30 Sec.

County: DODDRIDGE

Company: KEY OIL COMPANY  
22 Garton Plaza  
WESTON, WV 26452-0000

Agent: JAN E. CHAPMAN

Inspector: MIKE UNDERWOOD  
Permit Issued: 12/29/97  
Well Work Commenced: 01/16/98  
Well Work Completed: 01/22/98

Verbal Plugging  
Permission granted on: \_\_\_\_\_ Rig  
Rotary X Cable \_\_\_\_\_ 5316'  
Total Depth ( feet ) \_\_\_\_\_  
Fresh water depths ( ft ) 67', 170'  
Salt water depths ( ft ) NONE

Is coal being mined in area ( Y / N )? N  
Coal Depths ( ft ): NONE

OPEN FLOW DATA

Balltown  
Rileys  
Benson  
Elk

Producing formation Alexander  
Gas: Initial open flow 15 MCF / d Pay zone depth ( ft ) 3684' - 3908'  
Final open flow 1,624 MCF / d Oil: Initial open flow 0 Bbl / d 4395' - 4794'  
Time of open flow between initial and final tests N/A Oil: Final open flow show Bbl / d 4823' - 4834'  
Static rock pressure 1800 psig ( surface pressure ) after 96 Hours 5018' - 5028'  
5056' - 5156'

Second producing formation Commingled  
Gas: Initial open flow \_\_\_\_\_ MCF / d Pay zone depth ( ft ) \_\_\_\_\_  
Final open flow \_\_\_\_\_ MCF / d Oil: Initial open flow \_\_\_\_\_ Bbl / d  
Time of open flow between initial and final tests \_\_\_\_\_ Oil: Final open flow \_\_\_\_\_ Bbl / d  
Static rock pressure \_\_\_\_\_ psig ( surface pressure ) after \_\_\_\_\_ Hours

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORMED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

For: KEY OIL COMPANY

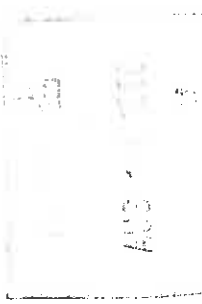
By: 

PRESIDENT

Date: August 9, 1998

Dood 4420

AUG 24 1998



Casing & Tubing Size	Used in Drilling	Left In Well	Cement Fill Up Cu. Ft.
11 3/4"	130.10	130.10	70 sks To Surface
8 5/8"	1883	1883	560 sks To Surface
4 1/2"	5246	5246	380 sks
2 3/8"		5100	

C. E. Ross #2 (47-017-4420)  
Four Stage Foam Frac - Halliburton

1<sup>st</sup> Stage: Alexander ( 10 holes ) ( 5120.25' to 5137.50' ) 60 Quality Foam, 500 gal. 15% HCL.  
Elk ( 3 holes ) ( 5025.75' to 5026.25' ) 60,000# 20/40 sand, 550,000 SCF N2,  
810 bbls foam.

2<sup>nd</sup> Stage: Benson ( 6 holes ) ( 4828.50' to 4829.75' ) 60 Quality Foam, 750 gal 15% HCL.  
Third Riley ( 2 holes ) ( 4769.50' to 4769.75' ) 40,000# 20/40 sand, 417,000 SCF N2,  
Second Riley ( 4 holes ) ( 4678' to 4678.75' ) 615 bbls foam.

3<sup>rd</sup> Stage: Riley ( 4 holes ) ( 4438.75' to 4439.50' ) 60 Quality Foam, 1,000 gal 15% HCL.  
Balltown ( 6 holes ) ( 4218' to 4340.75' ) 5,000# 80/100 sand, 45,000# 20/40 sand,  
502,000 SCF N2, 742bbls foam.

4<sup>th</sup> Stage: Balltown ( 13 holes ) ( 3451' to 3825.25' ) 60 Quality Foam, 1,000 gal 15% HCL.  
5,000# 80/100 sand, 45,000# 20/40 sand,  
502,000 SCF N2, 684 bbls foam.

WELL LOG

Fill & Shell	0	19	
Sand & Shale	19	84	Damp @ 67'
Sand & Shale & Red Rock	84	236	
White Sand	236	404	Damp @ 170'
Red Rock & Sand & Shale	404	1142	
Sand & Shale	1142	1448	
Sand	1448	1846	
Little Lime	1846	1869	
Sand & Shale	1869	1897	
Big Lime	1897	1951	
Big Injun	1951	2023	<u>Gas Checks</u>
Shale	2023	2195	2502' - No show
Weir	2195	2326	2999' - No Show
Sand & Shale	2326	2382	3620' - No Show
Berea	2382	2394	4301' - No Show
Sand & Shale	2394	3250	4732' - No Show
Warren	3250	3325	5060' - 2/10 <sup>ths</sup> -1" w/H <sub>2</sub> O
Shale	3325	3338	
Speechley	3338	3456	
Shale	3456	3684	
Balltown	3684	4361	
Shale	4361	4395	
Riley	4395	4474	
Shale	4474	4664	
Second Riley	4664	4684	
Sand & Shale	4684	4723	
Third Riley	4723	4794	
Shale	4794	4823	
Benson	4823	4834	
Shale	4834	5018	
Elk	5018	5028	
Shale	5028	5065	
Alexander	5065	5156	
Sand & Shale	5156	5316	
TD	5316		

2-26-12/18/19

STATE OF WEST VIRGINIA  
DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS  
WELL WORK PERMIT APPLICATION

Well Operator: KEY OIL COMPANY 475 25685 ① 562  
Operator's Well Number: C. E. ROSS #2 3) Elevation: 906'

Well type: (a) Oil X / or Gas X / Issued 12/29/97  
(b) If Gas: Production X / Underground Storage / Expired 12/29/99  
Deep / Shallow X /

5) Proposed Target Formation(s): ALEXANDER 47-017-04420

6) Proposed Total Depth: 5600 feet

7) Approximate fresh water strata depths: 80

8) Approximate salt water depths: N/A

9) Approximate coal seam depths: N/A

10) Does land contain coal seams tributary to active mine? Yes    / No X /

11) Proposed Well Work: DRILL, STIMULATE, PRODUCE

12)

CASING AND TUBING PROGRAM

TYPE SPECIFICATIONS FOOTAGE INTERVALS CEMENT

TYPE	Size	Grade	Weight per ft.	For drilling	Left in well	Fill-up (cu. ft.)
Conductor						
Fresh Water	11 3/4	ERW	42	132	132	305981.3
Coal						70 SKS. TO SURFACE
Intermediate	8 5/8	ERW	23	1880	1880	305981.2
Production	4 1/2	J-55	10.5	5500	5500	505 SKS. TO SURFACE
Tubing	1.5					490 SKS.
Liners						305981.1

PACKERS : Kind \_\_\_\_\_  
Sizes \_\_\_\_\_  
Depths set \_\_\_\_\_

For Office of Oil and Gas Use Only

Fee(s) paid:  Well Work Permit  Reclamation Fund  WPCP  
Plat  WW-9  WW-2B  Bond \_\_\_\_\_ (Type)  Agent

1) Date: DECEMBER 16, 1997  
2) Operator's well number C. E. ROSS #2  
3) API Well No: 47-017 - 4420  
State            County            Permit           

STATE OF WEST VIRGINIA - BUREAU OF ENVIRONMENT  
DIVISION OF ENVIRONMENTAL PROTECTION  
OFFICE OF OIL AND GAS

NOTICE AND APPLICATION FOR A WELL WORK PERMIT

4) Surface Owner(s) to be served: 5 (a) Coal Operator:             
 (a) Name C. P. DEBRULAR HEIRS Name            NONE  
 Address            Address             
2604 27TH STREET  
 (b) Name PARKERSBURG, WV 26104 (b) Coal Owner(s) with Declaration  
 Address            Name            Address             
 (c) Name            Name             
 Address            Address           

6) Inspector MIKE UNDERWOOD (c) Coal Lessee with Declaration  
 Address RT. 2 BOX 135 Name             
SAL EM, WV 26426 Address             
 Telephone (304)-782-1043

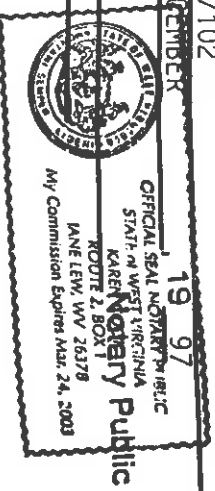
TO THE PERSON(S) NAMED ABOVE TAKE NOTICE THAT:

Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil and gas OR  
 Included is the information required by Chapter 22, Article 6, Section 8(d) of the Code of West Virginia (see page 2)  
 I certify that as required under Chapter 22 of the West Virginia Code I have served copies of this notice and application, a location plat, and accompanying documents pages 1 through        on the above named parties, by:  
 Personal Service (Affidavit attached)  
 Certified Mail (Postmarked postal receipt attached)  
 Publication (Notice of Publication attached)

I have read and understand Chapter 22-6 and 38 CSR 11-18, and I agree to the terms and conditions of any permit issued under this application.  
 I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete.  
 I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Well Operator            KEY OIL COMPANY  
 By:             
 Its: PRESTON  
 Address 22 GARTON PLAZA  
WESTON, WV 26452

Subscribed and sworn before me this 16TH day of            19 97  
 Telephone 304-269-7102 DECEMBER  
 My commission expires MARCH 24, 2003  
Karen Cook  
 My commission expires MARCH 24, 2003



WR-35

29 - Dec - 97  
API # 47 - 17 - 04420

State of West Virginia  
Division of Environmental Protection  
Section of Oil and Gas

Well Operator's Report of Well Work

Farm name: DEBRULAR, C.P. HEIRS

Operator Well No.: C.E. ROSS #2

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Inspector: MIKE UNDERWOOD  
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Benson 4823' - 4834'  
Elk 5018' - 5028'  
Producing formation Alexander Pay zone depth ( ft ) 5056' - 5156'  
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Final open flow 1,624 MCF / d Oil: Final open flow show Bbl / d  
Time of open flow between initial and final tests N/A Hours  
Static rock pressure 1800 psig ( surface pressure ) after 96 Hours

Second producing formation Commingled  
Gas: Initial open flow MCF / d Pay zone depth ( ft )  
Final open flow MCF / d Oil: Initial open flow Bbl / d  
Time of open flow between initial and final tests Oil: Final open flow Bbl / d  
Hours  
Static rock pressure psig ( surface pressure ) after Hours

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For: KEY OIL COMPANY

By: 

PRESIDENT

Date: August 9, 1998

Dood 4420

NOV 24 1998



C. E. Ross #2 (47-017-4420)  
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