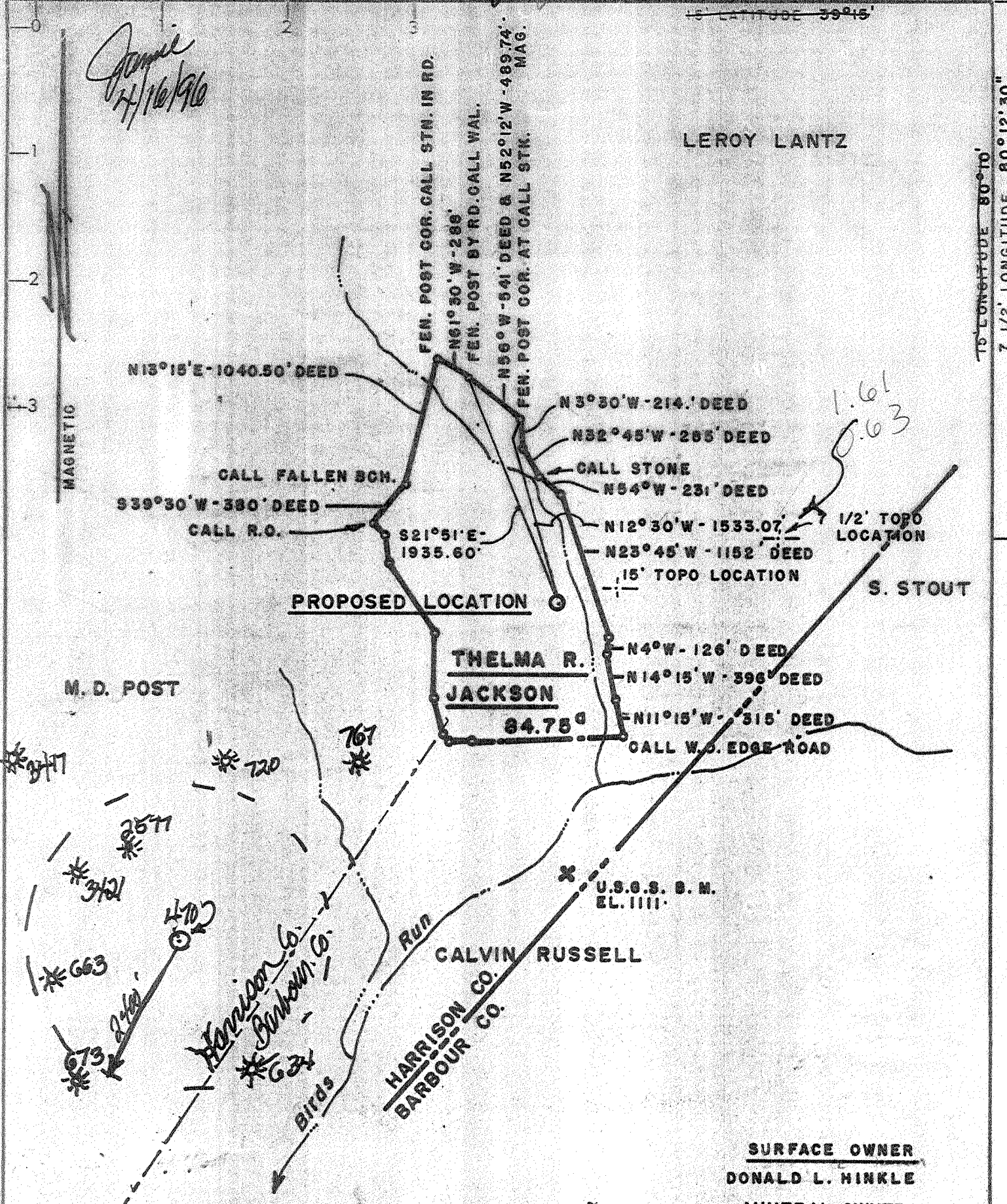


7 1/2' LATITUDE 39°12'30"  
~~5' LATITUDE 39°15'~~

7 1/2' LONGITUDE 80°10'  
 7 1/2' LONGITUDE 80°12'30"

*Janice*  
 7/16/96



**SURFACE OWNER**  
 DONALD L. HINKLE  
**MINERAL OWNER**  
 THELMA R. JACKSON, ET AL.

*Surface owner. Robert H. Morrison*  
*for structure Route 1 Box 489*

**CERTIFICATE**  
 I, the undersigned, being a duly qualified and licensed surveyor, do hereby certify that the foregoing map is correct to the best of my knowledge and belief and shows all the information required by the laws of West Virginia. Minimum degree of accuracy is one part in 200.

*Mount Clare, W.V. 26409*  
 Signed: *Harry L. Berger, Jr.*  
 HARRY L. BERGER, JR. L.L.S. 248

Prime Operating Company  
 714 1/2 Lee St. E, Charleston, WVA. 25301-1760

COMPANY ADDRESS

FARM: **THELMA R. JACKSON, ET AL. - MINERAL**

MAP: **44-A** ACRES: **85** LEASE NO: **145-002**

WELL (FARM) NO: **2** SERIAL NO: **470**

ELEVATION (SPIRIT LEVEL): **1162.50'**

QUADRANGLE: **15' PHILIPPI N.W. & 7 1/2' BROWNTON**

COUNTY: **HARRISON** DISTRICT: **ELK**

POINT OF PROVEN ELEVATION: **U.S.G.S. B.M. SHOWN ON PLAT EL. 1111'**

FILE NO. \_\_\_\_\_ DRAWING NO. \_\_\_\_\_

DATE: **DEC. 12, 1980** SCALE: **1" = 1000'**

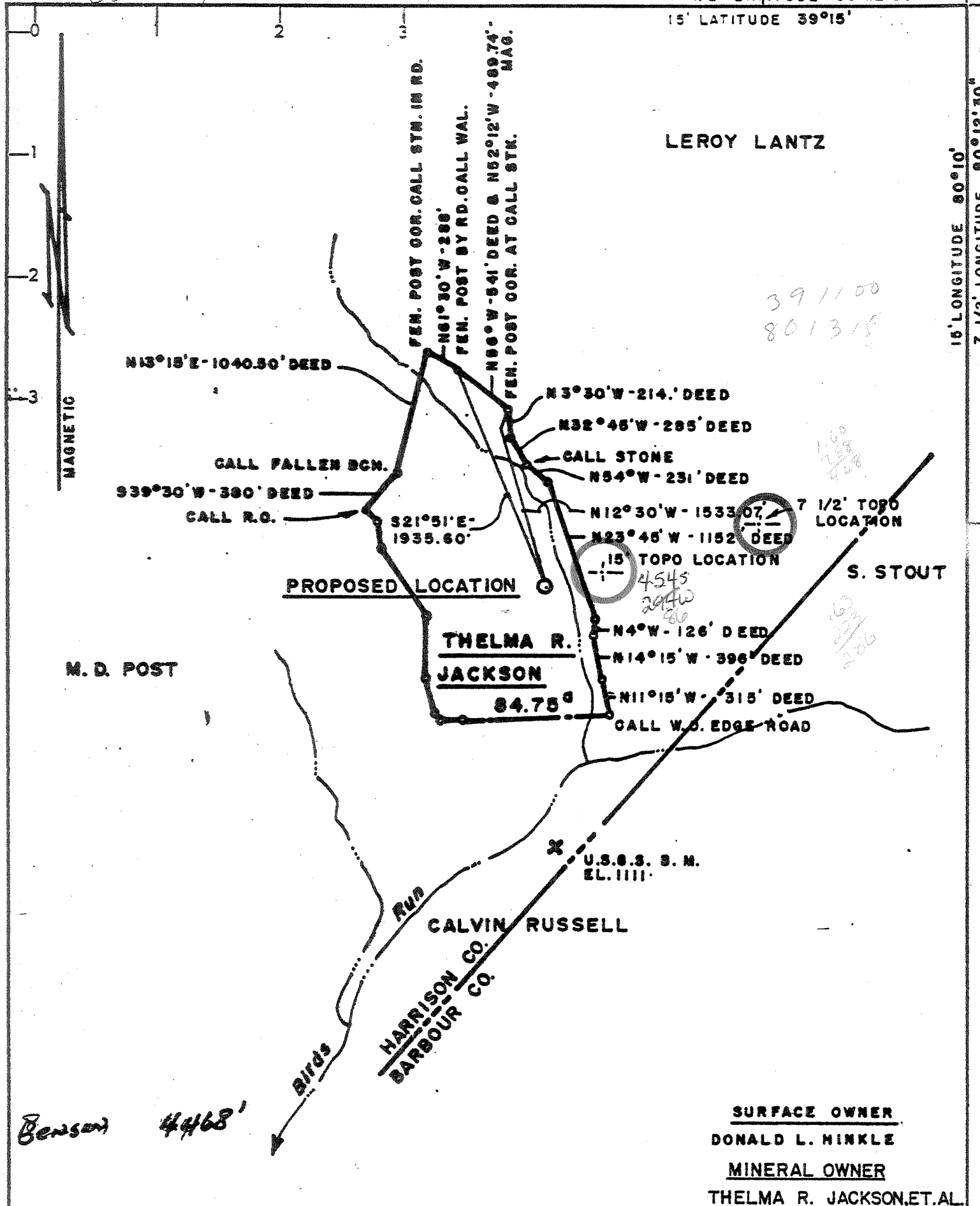
STATE OF WEST VIRGINIA  
 DIVISION OF ENVIRONMENTAL PROTECTION  
 OFFICE OF OIL & GAS  
 NITRO, WEST VIRGINIA 25143

*Ad Well No. 47-033-025787*  
*TD 3173 TD. Balltown completed 1981*  
*Free. depth 1600-1638'*  
*Commiss. with Balltown*

APR 26 1996

cl. 4/10 lot Card CSD

3350'  
7 1/2' LATITUDE 39°12'30"  
15' LATITUDE 39°15'



391100  
801315

160  
212  
228

4545  
2040  
200

160  
212  
228

Benson 4468'

**SURFACE OWNER**  
DONALD L. HINKLE  
**MINERAL OWNER**  
THELMA R. JACKSON, ET. AL.

- NEW LOCATION
- RECONDITION
- DRILL DEEPER
- ABANDONMENT

I, the undersigned, hereby certify that this map is true to the best of my knowledge and belief and shows all the information required by paragraph 1 of the rules and regulations of the oil and gas section of the mining laws of West Virginia.

**CERTIFICATE**

200  
HARRY L. BERGER, JR. L.L.S. 248

N.B. H-13, PG. 73

COMPANY STERLING DRILLING & PRODUCTION CO., INC  
 ADDRESS 622 3RD AVE., SUITE 3800, N.Y., N.Y. 10017  
 FARM THELMA R. JACKSON, ET. AL. - MINERAL  
 MAP 44-A ACRES 85 LEASE NO. 145-002  
 WELL (FARM) NO. 2 SERIAL NO. 470  
 ELEVATION (SPIRIT LEVEL) 1162.50'  
 QUADRANGLE 15 PHILIPPI N.W. & 7 1/2' BROWNTON  
 COUNTY HARRISON DISTRICT ELK  
 POINT OF PROVEN ELEVATION U.S.G.S. B.M. SHOWN ON PLAT EL. 1111'  
 FILE NO. \_\_\_\_\_ DRAWING NO. \_\_\_\_\_  
 DATE DEC. 12, 1980 SCALE: 1" = 1000'

STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
OIL AND GAS DIVISION  
CHARLESTON  
WELL LOCATION MAP  
FILE NO. 47-033-2578

— DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS. SCALE 1" TO 62,500'. LATITUDE AND LONGITUDE LINES BEING REPRESENTED BY BORDER LINES AS SHOWN.

— DENOTES ONE INCH SPACES ON BORDER LINE OF ORIGINAL TRACING.

6-6 Glade Run (300)

APR 28 1981

ADD 2 2 1981

SEP 04 1996

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

Permitting Office of Oil & Gas

Well Operator's Report of Well Work

Farm name: MORRISON, ROBERT K. Operator Well No.: 2-470

LOCATION: Elevation: 1,162.50 Quadrangle: BROWNTON

District: ELK County: HARRISON
Latitude: 8500 Feet South of 39 Deg. 12Min. 30 Sec.
Longitude 3350 Feet West of 80 Deg. 12 Min. 30 Sec.

Company: PRIME OPERATING COMPANY
714 1/2 LEE STREET, EAST
CHARLESTON, WV 25301-1707

Agent: ROBERT L. BLACKBURN

Inspector: TIM BENNETT
Permit Issued: 04/24/96
Well work Commenced: 06/05/96
Well work Completed: 08/02/96
Verbal Plugging
Permission granted on:
Rotary Cable Rig
Total Depth (feet)
Fresh water depths (ft)
Salt water depths (ft)
Is coal being mined in area (Y/N)? N
Coal Depths (ft):

Table with 4 columns: Casing & Tubing Size, Used in Drilling, Left in Well, Cement Fill Up Cu. Ft.
Rows include: 8 5/8" (248' drilling, 248' left, 205 sks cement), 4 1/2" (3161' left, 335 sks cement), 2 3/8" (2127' left, 5950 pos cement)

OPEN FLOW DATA

Producing formation Balltown Pay zone depth (ft) 3120
Gas: Initial open flow show MCF/d Oil: Initial open flow 0 Bbl/d
Final open flow 81 MCF/d Final open flow 0 Bbl/d
Time of open flow between initial and final tests 24 Hours
Static rock Pressure 170 psig (surface pressure) after 24 Hours

Second producing formation Injun Pay zone depth (ft) 1634
Gas: Initial open flow show MCF/d Oil: Initial open flow 0 Bbl/d
Final open flow 119 MCF/d Final open flow 0 Bbl/d
Time of open flow between initial and final tests 12 Hours
Static rock Pressure 490 psig (surface pressure) after 24 Hours

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED 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: PRIME OPERATING COMPANY

By: Robert L. Blackburn
Date: August 30, 1996

SEP 04 1996

Jackson #470 -Rework

API 47-033-02578

Hitwell set plug at 1770'

Perforated Injun sand from 1616-1620' w/5 holes and from 1628-1634' w/8 holes total 13 holes.

Dowell fractured Injun sand with 75Q foam 20,000# 20/40 sand 500 gallons 15% acid.



JACKSON 470

STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES

Oil and Gas Division

WELL RECORD

Rotary X Oil X  
Cable \_\_\_\_\_ Gas X  
Recycling \_\_\_\_\_ Comb. \_\_\_\_\_  
Water Flood \_\_\_\_\_ Storage \_\_\_\_\_  
Disposal \_\_\_\_\_ (Kind) \_\_\_\_\_

Quadrangle PHILLIPPI NW

Permit No. HAR-2578

Company <u>Sterling Drilling &amp; Production Co. Inc.</u>	Casing and Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft. (Sks.)
Address <u>360 Madison Ave., -NY, NY 10017</u>	Size <u>20-16</u>			
Farm <u>Jackson</u> Acres <u>85</u>	Cond. <u>13-10"</u>			
Location (waters) <u>Birds Run</u>	<u>9 5/8</u>			
Well No. <u>470</u> Elev. <u>1162.51</u>	<u>8 5/8</u>	<u>848</u>	<u>848</u>	<u>205 sks 50/50</u>
District <u>Elk</u> County <u>Harrison</u>	<u>7</u>			<u>POZ</u>
The surface of tract is owned in fee by <u>Donald L. Hinkle</u>	<u>5 1/2</u>		<u>3161</u>	<u>335 sks RFC</u>
Address <u>Birds Run Rd. Clarksburg, WV</u>	<u>4 1/2</u>			<u>50/50</u>
Mineral rights are owned by <u>Thelma Jackson</u>	<u>3</u>			
<u>120 Marshall St. Clarksburg, WV</u>	<u>2</u>			
Address _____	Liners Used			
Drilling Commenced <u>August 1, 1981</u>				
Drilling Completed <u>August 6, 1981</u>				
Initial open flow <u>7</u> cu. ft. <u>0</u> bbls.				
Final production <u>267</u> Mcu. ft. per day <u>2-1/2</u> bbls.				
Well open <u>4</u> hrs. before test <u>1260</u> #RP.				

Well treatment details:

Attach copy of cementing record.

Perforated Balltown with 4 holes from 3116 to 3120, 4 holes from 3076 to 3080, 3 holes from 2985 to 2989, 3 holes from 2890 to 2892. Fractured with 500 gal. 15% Hcl Acid 15,000# 80/100 Sand, 65,000# 20/40 Sand, 675 barrels water.

Coal was encountered at 0 Feet \_\_\_\_\_ Inches  
Fresh water \_\_\_\_\_ Feet \_\_\_\_\_ Salt Water \_\_\_\_\_ Feet \_\_\_\_\_  
Producing Sand Balltown Depth 2890-3120

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Sand - Rock - Shell			0	1000		
Shell			1000	1050		
Salt Sand			1050	1160		
Maxton Sandstone - Shell			1160	1410		
Little Lime			1410	1444		
Red Rock			1444	1456		
Big Lime			1456	1600		
Injun			1600	1638		
Shell			1638	1860		
Sand			1860	1950		
Sandstone & Shell			1950	2380		
Fifth Sand			2380	2424		
Shell			2424	2454		
Sand			2454	2466		
Shell			2466	2980		
Balltown			2980	2990		
Shell			2990	3070		
Balltown			3070	3120		
Shell			3120	3173		
				3173		

**RECEIVED**

SEP 24 1981

OIL AND GAS DIVISION  
WV DEPARTMENT OF MINES

T.D.

OCT 08 1981



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES

RECEIVED

APR - 9 1981

Oil and Gas Division

OIL & GAS DIVISION  
DEPT. OF MINES

OIL AND GAS WELL PERMIT APPLICATION

JACKSON #470

TO THE DEPARTMENT OF MINES,  
Charleston, W. Va.

DATE December 19, 1980

Surface Owner Donald L. Hinkle

Company Sterling Drilling and Production Co., Inc.

Address Byrds Run Rd. Clarksburg, W.V. 26301

Address Suite 3800 622 3rd Ave. N.Y., N.Y. 10017

Mineral Owner Thelma Jackson

Farm Jackson Acres 85

Address 120 Marshall St. Clarksburg, W.V. 26301

Location (waters) Birds Run

Coal Owner Unknown - Unoperated

Well No. 470 Elevation 1162.5

Address \_\_\_\_\_

District Elk County Harrison

Coal Operator \_\_\_\_\_

Quadrangle Brownton 7.5'

Address \_\_\_\_\_

THIS PERMIT MUST BE POSTED AT THE WELL SITE

All provisions being in accordance with Chapter 22, of the W. Va. Code, the location is hereby approved for drilling. This permit shall expire if operations have not commenced by 12-13-81

INSPECTOR

TO BE NOTIFIED Paul Garrett

ADDRESS 321 Beech St. Clarksburg, W.V. 26301

PHONE 622 - 3871

[Signature]  
Deputy Director - Oil & Gas Division  
GENTLEMEN:

The undersigned well operator is entitled to drill upon the above named farm or tract of land for oil and gas, having fee title thereto, (or as the case may be) under grant or lease dated April 22, 1980 by T. Jackson made to Sterling Drilling and Production Co., Inc. and recorded on the 28th day of April 19 80 in Harrison County, Book 1090 Page 1081 Lease # 145 - 002

NEW WELL  DRILL DEEPER  REDRILL  FRACTURE OR STIMULATE  
OIL AND GAS WELL ORIGINALLY DRILLED BEFORE JUNE 5, 1969.

The enclosed plat was prepared by a registered engineer or licensed land surveyor and all coal owners and/or operators have been notified as of the above date.

The above named coal owners and/or operator are hereby notified that any objection they wish to make, or are required to make by Section 3 of the Code, must be received by, or filed with the Department of Mines within ten (10) days. \*

Copies of this notice and the enclosed plat were mailed by registered mail, or delivered to the above named coal operators or coal owners at their above shown respective address \_\_\_\_\_ day \_\_\_\_\_ before, or on the same day with the mailing or delivery of this copy to the Department of Mines at Charleston, West Virginia.

PLEASE SUBMIT COPIES OF ALL  
GEOPHYSICAL LOGS DIRECTLY TO:

WEST VIRGINIA GEOLOGICAL AND  
ECONOMIC SURVEY  
P. O. BOX 879  
MORGANTOWN, WEST VIRGINIA 26505  
AC-304 - 292-6331

Address  
of  
Well Operator

Arcade Building-710 Virginia St., E.  
Street  
Charleston,  
City or Town  
West Virginia 25301  
State

Very truly yours,

(Sign Name) [Signature]

Well Operator

\*SECTION 3 . . . . If no objections are filed or found by the Department of mines, within said period of ten days from the receipt of notice and plat by the department of mines, to said proposed location, the department shall forthwith issue to the well operator a permit reciting the filing of such plat, that no objections have been made by the coal operators or found thereto by the department and that the same is approved and the well operator authorized to proceed.

47-033-2578

PERMIT NUMBER

"I have read and understand the reclamation requirements as set forth in Chapter 22, Article 4, Section 12-b and will carry out the specified requirements."

Signed by \_\_\_\_\_

BLANKET BOND

[Signature]



THIS IS AN ESTIMATE ONLY  
ACTUAL INFORMATION WILL BE SUBMITTED ON OG-10 UPON COMPLETION

PROPOSED WORK ORDER TO X DRILL \_\_\_\_\_ DEEPEN \_\_\_\_\_ FRACTURE-STIMULATE \_\_\_\_\_  
 DRILLING CONTRACTOR: (If Known) RESPONSIBLE AGENT:  
 NAME FWA Drilling Co., Inc. NAME Gordon C. Morton  
 ADDRESS Box 448 Elkview, W.V. 25071 ADDRESS Arcade Building, Charleston, W.V.  
 TELEPHONE 965 - 3379 TELEPHONE 342 - 0121  
 ESTIMATED DEPTH OF COMPLETED WELL: 4468 ROTARY X CABLE TOOLS \_\_\_\_\_  
 PROPOSED GEOLOGICAL FORMATION: Benson  
 TYPE OF WELL: OIL \_\_\_\_\_ GAS X COMB. \_\_\_\_\_ STORAGE \_\_\_\_\_ DISPOSAL \_\_\_\_\_  
 RECYCLING \_\_\_\_\_ WATER FLOOD \_\_\_\_\_ OTHER \_\_\_\_\_

TENTATIVE CASING PROGRAM:

CASING AND TUBING SIZE	USED FOR DRILLING	LEFT IN WELL	CEMENT FILL UP OR SACKS - CUBIC FT.
20 - 16			
11 3/4	130'	130'	To Surface
9 - 5/8			
8 - 5/8	1310'	1310'	300sks
7			
5 1/2			
4 1/2		4468'	150sks
3			Perf. Top
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS \_\_\_\_\_ FEET \_\_\_\_\_ SALT WATER \_\_\_\_\_ FEET \_\_\_\_\_

APPROXIMATE COAL DEPTHS 0

IS COAL BEING MINED IN THE AREA? No BY WHOM? \_\_\_\_\_

TO DRILL:

SUBMIT FIVE (5) COPIES OF OG - 1, \$100.00 PERMIT FEE, PERFORMANCE BOND AND PERMANENT COPY OF PLAT.

TO DRILL DEEPER OR REDRILL:

SUBMIT FIVE (5) COPIES OF OG - 1, SHOWING ORIGINAL PERMIT NUMBER AND PERFORMANCE BOND. ON WELLS DRILLED PRIOR TO 1929, A PERMANENT COPY OF THE PLAT AND THE ORIGINAL WELL RECORD MUST ALSO BE SUBMITTED.

TO FRACTURE - STIMULATE:

OIL AND/OR GAS WELL ORIGINALLY DRILLED BEFORE JUNE 5, 1929, FIVE (5) COPIES OG - 1, PERFORMANCE BOND, PERMANENT PLAT AND ORIGINAL WELL RECORD.

OIL AND/OR GAS WELL ORIGINALLY DRILLED ON AND/OR AFTER JUNE 5, 1929, FIVE COPIES OG - 1, SHOWING ORIGINAL PERMIT NUMBER, AND PERFORMANCE BOND.

Required forms must be filed within ninety (90) days of completion for bond release. Inspector to be notified twenty-four (24) hours in advance.

The following waiver must be completed by the coal operator if the permit is to be issued within ten days of receipt thereof.

WAIVER: I the undersigned, Agent for \_\_\_\_\_ Coal Company, Owner or Operator of the coal under this lease have examined and place on our mine maps this proposed well location.

We the \_\_\_\_\_ Coal Company have no objections to said well being drilled at this location, providing operator has complied with all rules and regulations in Articles 4, 5, and 7, Chapter 22 of the West Virginia Code.

\_\_\_\_\_  
For Coal Company

\_\_\_\_\_  
Official Title

MAR 21 1996

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

21781

- 1) Well Owner: Prime Operating Company <sup>594</sup> 39780 (5) 266
- 2) Operator's Well Number: 470 3) Elevation: 1162'
- 4) Well type: (a) Oil \_\_\_ / or Gas x /
- (b) If Gas: Production x / Underground Storage \_\_\_ /  
 Deep \_\_\_ / Shallow x /
- Proposed Target Formation(s): 371
- Proposed Total Depth: 3173 feet (See attached Well Record)
- 7) Approximate fresh water strata depths: 800'
- 8) Approximate salt water depths: 1000'
- 9) Approximate coal seam depths: 0'
- 10) Does land contain coal seams tributary to active mine? Yes \_\_\_ / No x /
- 11) Proposed Well Work: Set temporary plug, fracture injun, clean up well and drill out plug. Comingle with Balltown.
- 12)

Issued 04/24/96  
 Expired 04/24/98.

CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS		FOOTAGE INTERVALS		CEMENT	
	Size	Grade	Weight per ft.	For drilling		Left in well
Conductor						
Fresh Water	8 5/8"			848'	848'	205 sks
Coal						
Intermediate						
Production	4 1/2"				3161'	335 sks
Tubing						
Liners						

*Fracture injun  
 from well record*

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

43/10

For Office of Oil and Gas Use Only

Fee(s) paid:  Well Work Permit  Reclamation Fund  WPCP

Plat  WW-9  WW-2B  Bond Surety Agent

(Type)



RECEIVED  
Division of  
Environmental Protection  
APR 09 1996  
Permitting  
Office of Oil & Gas

- 1) Date: March 27, 1996
- 2) Operator's well number 470
- 3) API Well No: 47 - 033 - 2578 - F  
State - County - Permit

STATE OF WEST VIRGINIA  
DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS

NOTICE AND APPLICATION FOR A WELL WORK PERMIT

- 4) Surface Owner(s) to be served:
  - (a) Name Robert K. Morrison  
Address Route 1 Box 489  
Mount Clare, WV 26408
  - (b) Name \_\_\_\_\_  
Address \_\_\_\_\_
  - (c) Name \_\_\_\_\_  
Address \_\_\_\_\_
- 5) (a) Coal Operator:
  - Name Unoperated  
Address \_\_\_\_\_
  - (b) Coal Owner(s) with Declaration  
Name \_\_\_\_\_  
Address \_\_\_\_\_
  - Name \_\_\_\_\_  
Address \_\_\_\_\_
  - (c) Coal Lessee with Declaration  
Name \_\_\_\_\_  
Address \_\_\_\_\_
- 6) Inspector Tim Bennett  
Address 737 Karl Street  
Weston WV 26452  
Telephone (304)- 269-6167

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 22B, Article 1, Section 8(d) of the Code of West Virginia (see page 2)

I certify that as required under Chapter 22B 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 22B 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 Prime Operating Company  
By: Robert + Blackburn  
Its: Designated Agent/District Manager  
Address 714 1/2 Lee Street East  
Charleston, WV 25301-1707  
Telephone (304) 342-0121

Subscribed and sworn before me this 27th day of March, 1996

Mary Jo Stowers Notary Public

My commission expires September 18, 2005