



121 ACRES - OIL & GAS
 JAMES N. ANDREWS, et al
 NUTTER FARM, W.VA.

SURFACE: 121 ACRES
 HG. ELDER, et ux 88 AC.
 NUTTER FARM, W.VA.

W.VA. DEPT. OF HIGHWAYS 1285
 JAMES N. ANDREWS 20.15 AC.
 NUTTER FARM, W.VA.

FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 1000'
 MINIMUM DEGREE OF
 ACCURACY 1 PART IN 200
 PROVEN SOURCE OF
 ELEVATION USGS BM JCTS OF R-2-31
Old US 50 SE OF LOC. ELEV. = 733'

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 REGU-
 LATIONS ISSUED AND PRESCRIBED BY THE DEPART-
 MENT OF MINES. *Mark C. Echard*
 (SIGNED) MARK C. ECHARD
 R.P.E. _____ L.L.S. 490

PLACE SEAL HERE

(+) DENOTES LOCATION OF
 WELL ON UNITED STATES
 TOPOGRAPHIC MAPS
 FORM IV-6
 (8-78)



DATE FEBRUARY 14, 1981
 OPERATOR'S WELL NO. ONE
 API WELL NO. _____
47 - 085 - 5076
 STATE COUNTY PERMIT

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION

WELL TYPE: OIL GAS LIQUID INJECTION _____ WASTE DISPOSAL _____
 (IF "GAS") PRODUCTION _____ STORAGE _____ DEEP _____ SHALLOW
 LOCATION: ELEVATION 751' 850RTE WATER SHED MARIETTA RUN OF GOOSE CREEK
 DISTRICT GRANT 2 COUNTY RITCHIE
 QUADRANGLE CAIRO 275 7.5' Harrisville, NW 057 1
 SURFACE OWNER HOWARD & O'ELLY, ELDER ACREAGE 88
 OIL & GAS ROYALTY OWNER JAMES N. ANDREWS, et al LEASE ACREAGE 121
 LEASE NO. _____
 PROPOSED WORK: DRILL CONVERT _____ DRILL DEEPER _____ REDRILL _____ FRACTURE OR
 STIMULATE _____ PLUG OFF OLD FORMATION _____ PERFORATE NEW
 FORMATION _____ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____
 PLUG AND ABANDON _____ CLEAN OUT AND REPLUG _____
 TARGET FORMATION GOBDAN ESTIMATED DEPTH 2600'
 WELL OPERATOR SANTE FE DRILLING CORP. DESIGNATED AGENT MR. ROBERT CORNELL
 ADDRESS P.O. BOX 1468 ADDRESS P.O. BOX 1468
PARKERSBURG, W.VA. 26101 PARKERSBURG, W.VA. 26101



RECEIVED
MAR 23 1987

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
Oil and Gas Division
WELL RECORD

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

Quadrangle Cairo
Permit No. 47-085-5076

Rotary X Oil _____
Cable _____ Gas _____
Recycling ? Comb. X
Water Flood _____ Storage _____
Disposal _____ (Kind)

Company Santa Fe Drilling Corporation
Address P.O. Box 1468, Parkersburg, WV
Firm James N. Andrews Acres 121
Location (waters) Marietta Run of Goose Creek
Well No. 1 Elev. 10618.50 DREF
District Grant County Ritchie
The surface of tract is owned in fee by Howard G. Elder
Address Cairo, WV
Mineral rights are owned by James N. Andrews
Address 1307 16th St., Parkersburg
Drilling Commenced 4-23-81
Drilling Completed 4-29-81
Initial open flow 30 MCF cu. ft. 0 bbls.
Final production ? cu. ft. per day ? bbls.
Well open 4 hrs. before test 200 RP.
Well treatment details:
Dowell Frac (HCL, SAND, WATER)

Casing and Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft. (Sks.)
Size 20-16			
Cond. 13-10"			
9 5/8			
8 5/8	250	250	
7			
5 1/2			
4 1/2		2849	230 sks
3			
2			
Liners Used			

Attach copy of cementing record.

Coal was encountered at N/A Feet _____ Inches _____
Fresh water 105 Feet _____ Salt Water _____ Feet _____
Producing Sand Blue Monday; Big Injun; Weir; Gorden; 5th Sand Depth 1732-1802; 1928-1947; 2327-2343; 2564-2572; 2713-2719

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Soil			0	30		
Sand			30	105		
Shale			105	211		
Sand			211	305		
Shale			305	413		
Sand			413	536		
Shale			536	700		
Sand			700	802		
Shale			802	915		
Sand			915	985		
Shale			985	1072		
Sand			1072	1128		
Shale			1128	1202		
Sand			1202	1320		

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* Indicates Electric Log tops in the remarks section.

(over)

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	Remarks
Shale			1320	1438		
Sand			1438	1490		
Shale			1490	1530		
Sand			1530	1596		
Shale			1546	1732		
Blue Monday			1732	1802	Gas	
Shale			1802	1928		
Big Injun			1928	1947	Gas	
Shale			1947	2327		
Weir			2327	2343	Gas & Oil	
Shale			2343	2564		
Corden			2564	2572	Gas	
Shale			2572	2713		
5th Sand			2713	2719	Gas	
Shale			2719	2849	Bottom	

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DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

Date _____
Robert Cornell

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

Oil and Gas Division

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FEB 18 1981

OIL AND GAS WELL PERMIT APPLICATION

OIL & GAS DIVISION
DEPT. OF MINES

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

DATE 2-17-81

Surface Owner Howard G. Elder

Company Santa Fe Drilling Corporation

Address Nutter Farm, WV

Address P. O. Box 1468 Parkersburg, WV

Mineral Owner James N. Andrews

Farm Andrews Acres 121

Address Parkersburg, WV

Location (waters) Marietta Run of Goose Creek

Coal Owner NA

Well No. 1 Elevation 757

Address NA

District Grant County Ritchie

Coal Operator NA

Quadrangle Cairo

Address NA

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 10-20-81.

INSPECTOR
TO BE NOTIFIED K. Paul Goodnight

ADDRESS Smithville, WV 26178

PHONE 477-3660

Robert Russell
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 June 27, 1978 by James N. Andrews made to Kanawha Drilling Co. and recorded on the 14th day of July 1978, in Ritchie County, Book 125 Page 503

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

Very truly yours, SANTA FE DRILLING CORPORATION
(Sign Name) *Robert Russell*
Well Operator

Address
of
Well Operator

P. O. Box 1468
Street
Parkersburg,
City or Town
West Virginia 26101
State

*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.

47-085-5076

PERMIT NUMBER

BLANKET BOND

"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 _____

**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 Gene Stalnaker NAME R. Cornell
 ADDRESS Glenville, WV ADDRESS P. O. Box 1468, Parkersburg, WV
 TELEPHONE 462-5701 TELEPHONE 422-2121
 ESTIMATED DEPTH OF COMPLETED WELL: 3500 ROTARY X CABLE TOOLS _____
 PROPOSED GEOLOGICAL FORMATION: Devonian Shale
 TYPE OF WELL: OIL _____ GAS _____ COMB. _____ STORAGE _____ DISPOSAL _____
 RECYCLING _____ WATER FLOOD _____ OTHER _____

TENTATIVE CASING PROGRAM:

CASING AND TUBING SIZE	USED FOR DRILLING	LEFT IN WELL	CEMENT (LBS) OR SACKS - CUBIC FT.
20 - 16			
13 - 10			
9 - 5/8			
8 - 5/8	250	250	To Surface (80 sacks)
7			
5 1/2			
4 1/2		3500	200 sacks
3			Perf. Top
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS 65 FEET _____ SALT WATER _____ FEET _____
 APPROXIMATE COAL DEPTHS NA _____
 IS COAL BEING MINED IN THE AREA? NA 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