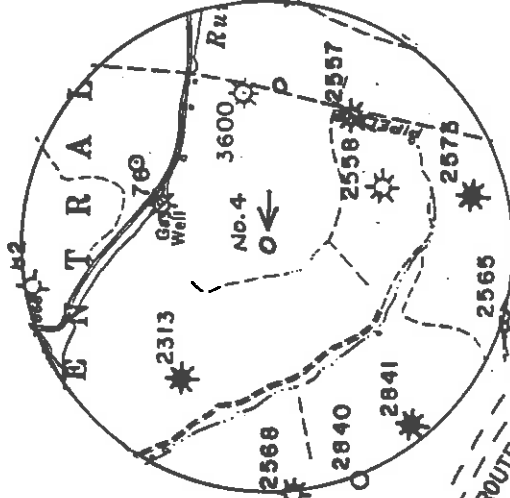


LATITUDE 39°15'00"

LONGITUDE 80°50'00"

7,650'



1.45 S 214.7'

D. ADAMS
98 AC. + 77 AC.

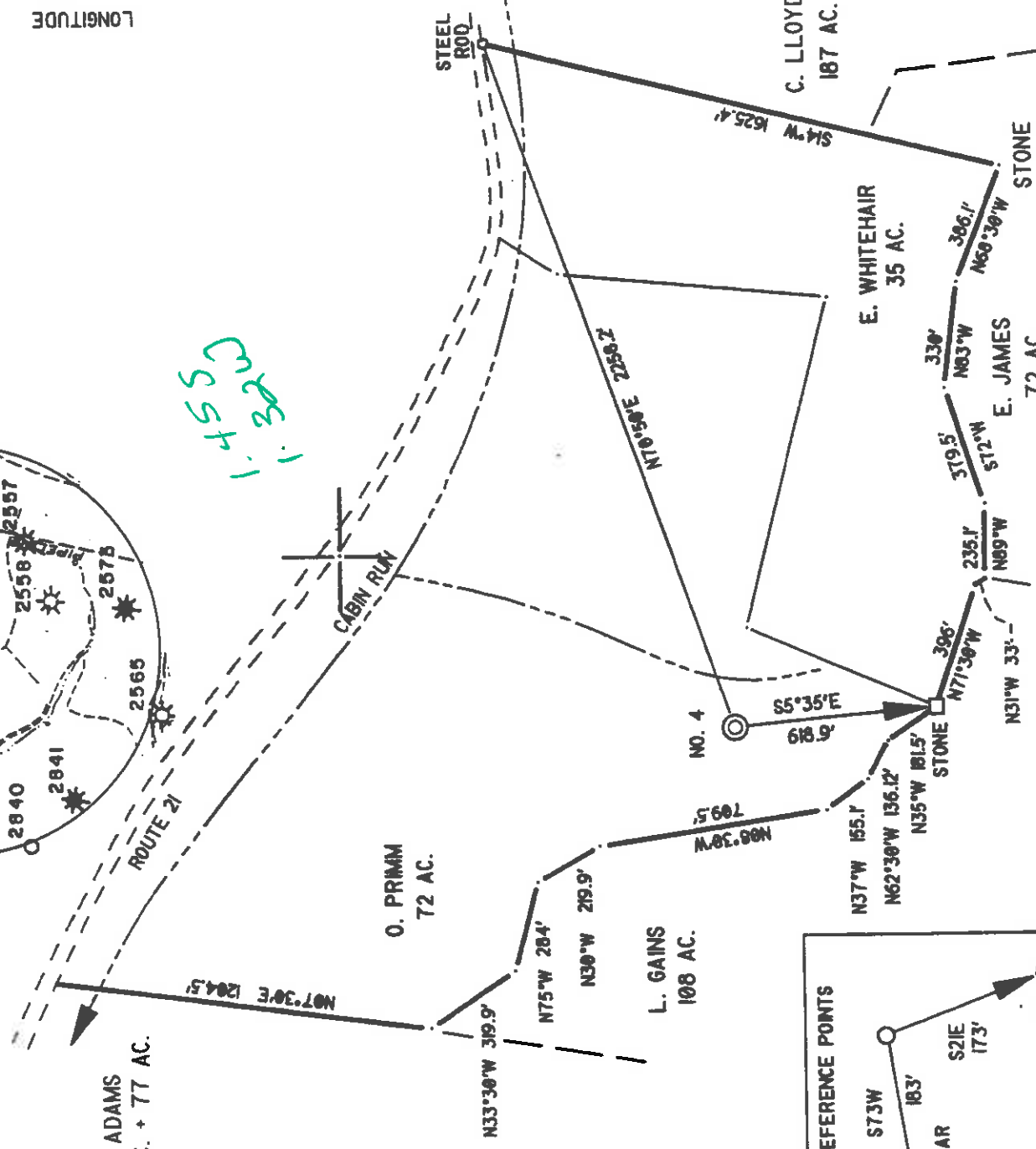
O. PRIMM
72 AC.

L. GAINS
108 AC.

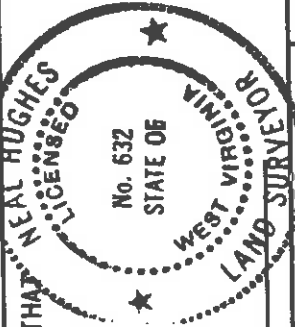
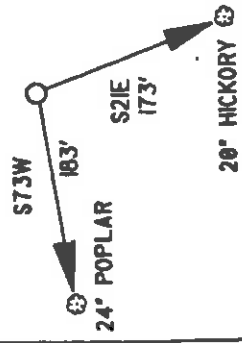
C. LLOYD
187 AC.

E. WHITEHAIR
35 AC.

E. JAMES
72 AC.



REFERENCE POINTS



I THE UNDERSIGNED, DO HEREBY CERTIFY THAT THIS PLAN 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.

L.L.S. *Neal Hughes*
632

(*) INDICATES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

DATE FEBRUARY 13, 19 97
 OPERATORS WELL NO. S. SMITH 4
 API WELL NO. 47-017-04369
 COUNTY PERMIT

STATE OF WEST VIRGINIA
 DEPARTMENT OF ENERGY
 OIL AND GAS DIVISION

MINIMUM DEGREE OF ACCURACY 1/200
 FILE NO. 96-52
 SCALE 1" = 500'
 PROVEN SOURCE OF ELEVATION ROAD INTER 928'

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

LOCATION: ELEVATION 1012' WATERSHED CABIN RUN
 DISTRICT CENTRAL COUNTY DODDRIDGE QUADRANGLE OXFORD
 SURFACE OWNER OLIN PRIMM ACREAGE 72
 ROYALTY OWNER SYLVESTER SMITH HEIRS LEASE ACREAGE 210

PROPOSED WORK:
 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
 ESTIMATED DEPTH 5600'

COUNTY NAME PERMIT
 WELL OPERATOR KEY OIL COMPANY DESIGNATED AGENT JAN CHAPMAN MAY 30 1997
 ADDRESS 22 GARTON PLAZA ADDRESS 22 GARTON PLAZA
 WESTON WV 26452 WESTON WV 26452

REC'D
Environmental
FFR

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: PRIMM, OLIN & Gas

Operator Well No. : S. SMITH #4

LOCATION: Elevation: 1,012.00

Quadrangle: OXFORD

District: CENTRAL
Latitude: 7650 Feet South of 39 Deg. 15 Min. 0 Sec.
Longitude: 7050 Feet West of 80 Deg. 50 Min. 0 Sec.

County: DODDRIDGE

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

Agent: JAN E. CHAPMAN

Inspector: MIKE UNDERWOOD
Permit issued: 05/27/97
Well Work Commenced: 08/24/97
Well Work Completed: 09/03/97

Verbal Plugging
Permission granted on: _____ Rig _____
Rotary Cable _____ 5425'
Total Depth (feet) _____
Fresh water depths (ft) NONE
Salt water depths (ft) NONE

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

OPEN FLOW DATA
Warren
Speechley
Balltown
Rileys
Benson
Elk

Producing formation Alexander Pay zone depth (ft) _____
Gas: Initial open flow show MCF / d _____ Oil: Initial open flow _____ Bbl / d
Final open flow 1,504 MCF / d _____ Oil: Final open flow show Bbl / d
Time of open flow between initial and final tests _____ N/A _____ Hours
Static rock pressure 1550 psig (surface pressure) after _____ 96 _____ Hours

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

By: 

PRESIDENT

Date: February 11, 1998

MAR 15 1998

| Casing & Tubing Size | Used in Drilling | Left In Well | Cement Fill Up Cu. Ft. |
|----------------------|------------------|--------------|------------------------|
| 11 3/4" | 123' | 123' | 70 sks To Surface |
| 8 5/8" | 1991' | 1991' | 580 sks To Surface |
| 4 1/2" | 5324' | 5324' | 470 sks |
| 2 3/8" | | 5163' | |

3340' - 3410'
3419' - 3540'
3754' - 4446'
4500' - 4880'
4926' - 4936'
5120' - 5133'
5166' - 5256'

S. Smith #4 (47-017-04369)
 Four Stage Foam Frac - Halliburton

1st Stage: Alexander (12 holes) (5198.25' to 5244.5') 60 Quality Foam. 500 gal. 15% HCL.
 Elk (2 holes) (5127.25' to 5127.5') 60,000# 20/40 sand, 550,000 SCF N2,
 811 bbls foam.

2nd Stage: Benson (6 holes) (4929.25' to 4930.50') 60 Quality Foam. 750 gal 15% HCL.
 Third Riley (6 holes) (4777.50' to 4778.75') 40,000# 20/40 sand, 417,000 SCF N2,
 616 bbls foam.

3rd Stage: Riley (10 holes) (4512.75' to 4533.50') 60 Quality Foam. 1000 gal 15% HCL.
 Balltown (2 holes) (4149' to 4149.25') 5,000# 80/100 sand, 45,000# 20/40 sand,
 502,000 SCF N2, 743 bbls foam.

4th Stage: Balltown (4 holes) (3769.25' to 4879.75') 60 Quality Foam. 1000 gal 15% HCL.
 Speechley (3 holes) (3526.5' to 3527') 5,000# 80/100 sand, 45,000# 20/40 sand,
 Warren (5 holes) (3387.5' to 3388') 502,000 SCF N2, 684 bbls foam.

WELL LOG

| | | | |
|-------------------------|------|------|--|
| Fill | 0 | 10 | |
| Clay | 10 | 14 | |
| Sand & Shale | 14 | 167 | |
| Sand & Shale & Red Rock | 167 | 1314 | |
| Sand | 1314 | 1334 | |
| Sand & Shale | 1334 | 1512 | |
| Upper Maxton | 1512 | 1564 | |
| Sand & Shale | 1564 | 1950 | |
| Little Lime | 1950 | 1960 | |
| Sand & Shale | 1960 | 1994 | |
| Big Lime | 1994 | 2053 | |
| Big Injun | 2053 | 2121 | |
| Shale | 2121 | 2286 | |
| Weir | 2286 | 2414 | |
| Sand & Shale | 2414 | 3340 | |
| Warren | 3340 | 3410 | |
| Shale | 3410 | 3419 | |
| Speechley | 3419 | 3540 | |
| Shale | 3540 | 3754 | |
| Balltown | 3754 | 4446 | |
| Shale & Sand | 4446 | 4500 | |
| Riley | 4500 | 4553 | |
| Shale | 4553 | 4766 | |
| Second Riley | 4766 | 4784 | |
| Sand & Shale | 4784 | 4846 | |
| Third Riley | 4846 | 4880 | |
| Shale | 4880 | 4926 | |
| Benson | 4926 | 4936 | |
| Sand & Shale | 4936 | 5120 | |
| Elk | 5120 | 5133 | |
| Shale | 5133 | 5166 | |
| Alexander | 5166 | 5256 | |
| Sand & Shale | 5256 | 5425 | |
| T.D. | 5425 | | |

Gas Checks
 2515' NO SHOW
 3010' Odor
 3505' NO SHOW
 4278' 2/10th 1/2" w/water
 4807' 6/10th 1/2" w/water
 5117' 10/10th 1/2" w/water
 Collars 2/10th 1/2" w/water

STATE OF WEST VIRGINIA
 DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
 WELL WORK PERMIT APPLICATION 017 4369

1) Well Operator: KEY OIL COMPANY 25655 C 526
 Operator's Well Number: SYLVESTER SMITH #4 3) Elevation: 1012'
 Well type: (a) Oil X / or Gas X / Issued 05/27/97
 (b) IF Gas: Production X / Underground Storage / Expires 05/27/99
 Deep / Shallow X /

Proposed Target Formation(s): ALEXANDER 402
 Proposed Total Depth: 5600 feet
 7) Approximate fresh water strata depths: 90'
 8) Approximate salt water depths: 467', 1206'
 9) Approximate coal seam depths: N/A

RECEIVED
 WV Division of
 Environmental Protection
 MAY 27 1997
 Permitting
 Office of Oil & Gas

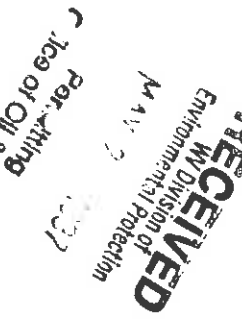
10) Does land contain coal seams tributary to active mine? Yes / No X /
 11) Proposed Well Work: DRILL, STIMULATE, PRODUCE
 12)

CASING AND TUBING PROGRAM

| TYPE | SPECIFICATIONS | FOOTAGE INTERVALS | CEMENT | | |
|--------------|----------------|-------------------|-------------------------|--------------|---------------------|
| | Size | Grade | Weight per ft. drilling | Left in well | Fill-up (cu. ft.) |
| Conductor | | | | | |
| Fresh Water | 11 3/4 | ERW | 42 | 132 | 78 SKS. TO SURFACE |
| Coal | | | | | |
| Intermediate | 8 5/8 | ERW | 23 | 1975 | 535 SKS. TO SURFACE |
| Production | 4 1/2 | J-55 | 10.5 | 5500 | 490 SKS. |
| Tubing | 1.5 | | | | |
| Liners | | | | | |

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



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

1) Date: MAY 12, 1997
2) Operator's well number SYLVESTER SMITH #4
3) API Well No: 47 - 017 - 4369
State County Permit

NOTICE AND APPLICATION FOR A WELL WORK PERMIT

4) Surface Owner(s) to be served: 5) (a) Coal Operator:

(a) Name OLIN PRIMM Name NONE
 Address RT. 1 Address _____
WEST UNION, WV 26456

(b) Name _____ (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 _____
SALEM, 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 [Signature] JAN CHAPMAN
 Its PRESIDENT
 Address 22 GARTON PLAZA
WESTON, WV 26452
 Telephone 304-269-7102

Subscribed and sworn before me this 12TH day of MAY 1997
[Signature] Notary Public
 My commission expires MARCH 24, 2003

