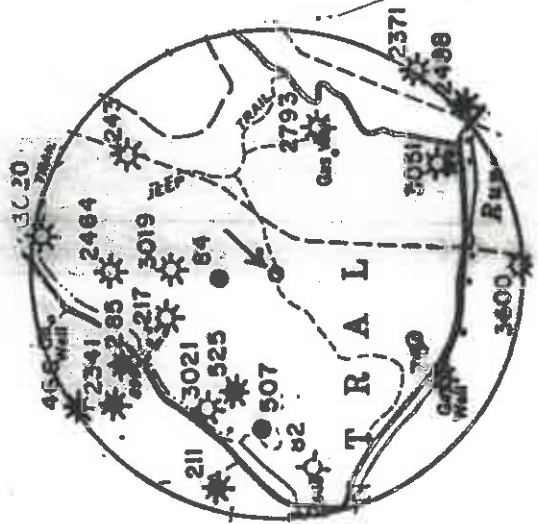
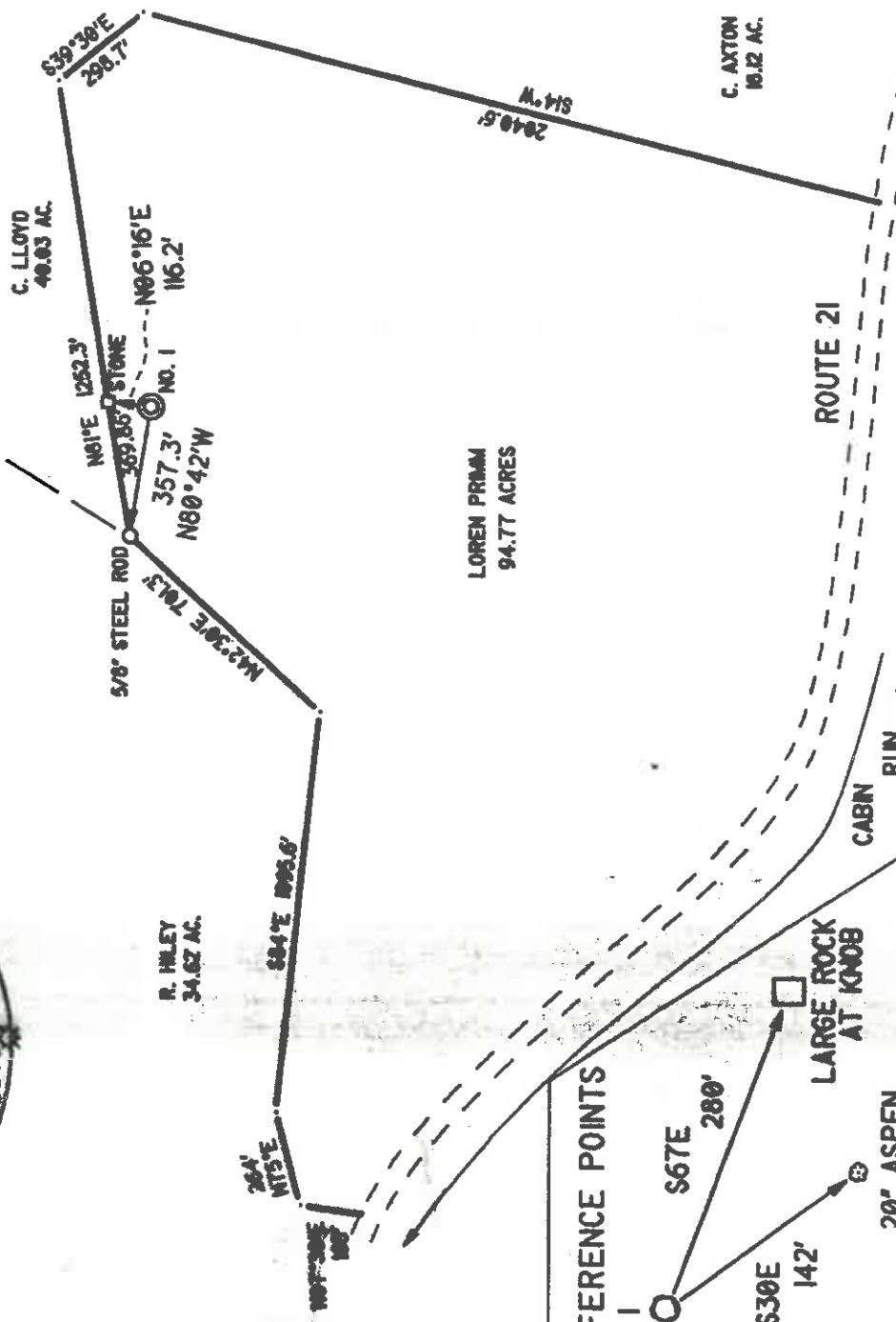


LATITUDE 5,500' 39°15'00"

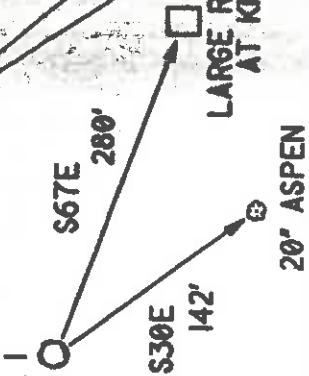
LONGITUDE 80°50'00"



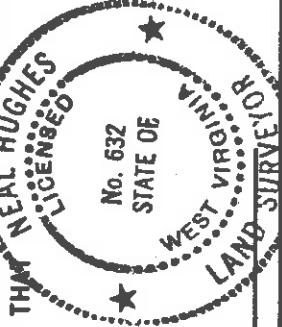
O.P. 505  
453



REFERENCE POINTS



I THE UNDERSIGNED, DO 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.



L.L.S. Neal Hughes  
632

(\*) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

DATE JULY 5 19 96  
OPERATORS WELL NO. S. SMITH I

API WELL NO. 47 - 017 - 04245  
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 KNOB 1243'

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

LOCATION: ELEVATION 1205' DISTRICT CENTRAL WATERSHED CABIN RUN

SURFACE OWNER LOREN PRimm COUNTY DODDRIDGE QUADRANGLE OXFORD

ROYALTY OWNER SYLVESTER SMITH HEIRS ACREAGE 94.77 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

COUNTY NAME DODDRIDGE PERMIT 5600'  
 ESTIMATED DEPTH 5600'  
 WELL OPERATOR KEY OIL COMPANY DESIGNATED AGENT JAN CHAPMAN  
 ADDRESS 22 GARTON PLAZA 415 ADDRESS 22 GARTON PLAZA  
 WESTON, WV 26452 WESTON, WV 26452

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

Well Operator's Report of Well Work

Farm name: PRIMM, LOREN

Operator Well No. : Sylvest Smith 1

LOCATION: Elevation: 1,205.00

Quadrangle: OXFORD

District: CENTRAL  
Latitude: 4900 Feet South of 39 Deg. 15 Min.  
Longitude: 5500 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: 08/20/96  
Well Work Commenced: 09/05/96  
Well Work Completed: 09/17/96

Verbal Plugging  
Permission granted on: \_\_\_\_\_  
Rotary X Cable \_\_\_\_\_ Rig  
Total Depth (feet) \_\_\_\_\_ 5634'  
Fresh water depths (ft) \_\_\_\_\_ NONE  
Salt water depths (ft) \_\_\_\_\_ 1115'

Is coal being mined in area (Y/N)? N  
Coal Depths (ft): \_\_\_\_\_ None Reported

OPEN FLOW DATA

Balltown  
Riley  
Benson

3832' - 4654'  
4704' - 5082'  
5126' - 5134'  
5398' - 5445'

Producing formation \_\_\_\_\_ Alexander \_\_\_\_\_  
Gas: Initial open flow 103 MCF / d \_\_\_\_\_ Pay zone depth (ft) \_\_\_\_\_  
Final open flow 1.524 MCF / d \_\_\_\_\_ Oil: Initial open flow \_\_\_\_\_ Bbl / d  
Time of open flow between initial and final tests \_\_\_\_\_ N/A \_\_\_\_\_ Oil: Final open flow show \_\_\_\_\_ Bbl / d  
Static rock pressure 1600 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 FEB 14 1997

Date: JANUARY 22, 1997

Casing & Tubing Size	Used In Drilling	Left in Well	Cement Fill Up Cu. Ft.
11 3/4"	124.75'	124.75'	70 sks
8 5/8"	2191.60'	2191.60'	To surface 635 sks
4 1/2"	5531.4'	5531.4'	To surface 380 sks
2 3/8"		5378'	

Sylvester Smith #1 (47-017-04295)  
 Four Stage Foam Frac - Halliburton

1st Stage:	Alexander (11 holes) (5398.75' - 5445')	60 Quality Foam. 500 gal 15% HCL. 60,000# 20/40 sand, 550,000 SCF N2, 813 bbls foam.
2nd Stage:	Benson (4 holes) (5131.5' - 5132.25') Third Riley (3 holes) (5065.75' - 5066.25') Second Riley (4 holes) (4979.5' - 4980.25')	60 Quality Foam. 750 gal 15% HCL. 35,000# 20/40 sand, 428,000 SCF N2, 570 bbls foam.
3rd Stage:	Riley (5 holes) (4729.5' - 4730.5') Baltown (4 holes) (4281' - 4431.5')	60 Quality Foam. 1000 gal 15% HCL. 10,000# 80/100 sand, 30,000# 20/40 sand, 508,000 SCF N2, 550 bbls foam.
4th Stage:	Baltown (10 holes) (3969' - 4121.50')	60 Quality Foam, 1,000 gal 15% HCL. 5,000# 80/100 sand, 35,000# 20/40 sand, 390,000 SCF N2, 589 bbls foam.
<b>WELL LOG</b>		
Clay	0	
Red Rock & Sand & Shale	3	
Sand	26	
Red Rock & Sand & Shale	52	
Sand	596	
Red Rock & Sand & Shale	683	
Sand	1363	
Sand & Shale	1475	Damp @ 1115'
Sand	1564	
Sand & Shale	1668	
Black Shale	1681	
Sand & Shale	1703	
White Sand	1711	
Sand & Shale	1790	
Maxon	2087	
Sand & Shale	2100	
Little Lime	2138	
Pencil Cave	2165	
Big Lime	2169	
Big Injun	2250	
Shale	2304	
Weir	2470	
Shale	2599	
Berea	2664	
Sand & Shale	2669	
Warren	3496	
Shale	3598	
Speechley	3609	
Shale	3728	
Baltown	3832	
Shale	4654	
Riley	4704	
Shale	4768	
2nd Riley	4952	
Shale	4986	
3rd Riley	5046	
Shale	5082	
Benson	5126	
Sand & Shale	5136	
Alexander	5370	
Sand & Shale	5460	
T.D.	5496	
		Gas Checks
		2499 4/10 H2O 2"
		3027 20/10 H2O 1"
		3798 20/10 H2O 1"
		4356 40/10 H2O 1"
		5033 8/10 H2O 1"
		5344 4/10 H2O 2"
		5590 6/10 H2O 2"

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

1) Well Operator: KEY OIL COMPANY <sup>475</sup> 25655 ① 526

2) Operator's Well Number: Sylvester Smith #1 3) Elevation: 1205'

4) Well type: (a) Oil X / or Gas X /

(b) If Gas: Production X / Underground Storage /  
Deep / / Shallow X /

22418

**RECEIVED**  
WV Division of  
Environmental Protection

Proposed Target Formation(s): ALEXANDER

Proposed Total Depth: 5600 feet

Approximate fresh water strata depths: 100'

Approximate salt water depths: 2094'

Approximate coal seam depths: NONE

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

Proposed Well Work: DRILL. STIMULATE. PRODUCE

12)

CASING AND TUBING PROGRAM

TYPE	SIZE	GRADE	WEIGHT PER FT. DRILLING	FOOTAGE INTERVALS	CEMENT
Conductor	11 3/4	ERW	42	42	0
Fresh Water	8 5/8	ERW	23	1205	1205
Coal					
Intermediate					
Production	4 1/2	J-55	10.5	5500	5500
Tubing	1.5				
Liners					

Fill-up (cu. ft.) 0. X. 1205  
325 SKS. TO SURFACE

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)

1) Date: August 6, 1996  
2) Operator's well number Sy]vester Smith #1  
3) API Well No: 47 - 017 - 4295  
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:

(a) Name	Loren Primm	5) (a) Coal Operator:	Name	None
Address	HC 67, Box 42	Address		
	Hundred, WV 26575	(b) Coal Owner(s) with Declaration	Name	
(b) Name		Address		
Address		Name		
(c) Name		Address		
Address		(c) Coal Lessee with Declaration	Name	
		Address		

6) Inspector Mike Underwood  
Address RT. 2 Box 135  
Salem, WV 26426  
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.

BY: [Signature] Key Oil Company  
Well Operator  
Its: [Signature] President  
Address 22 Garton Plaza  
Weston, WV 26452  
Telephone 304-269-7102

Subscribed and sworn before me this 6th day of August 1996

My commission expires March 24, 2003

