

5,375'

LATITUDE 39°15'00"

LONGITUDE 80°50'00"

7,750'



D. ADAMS
98 AC. + 77 AC.

ROUTE 21

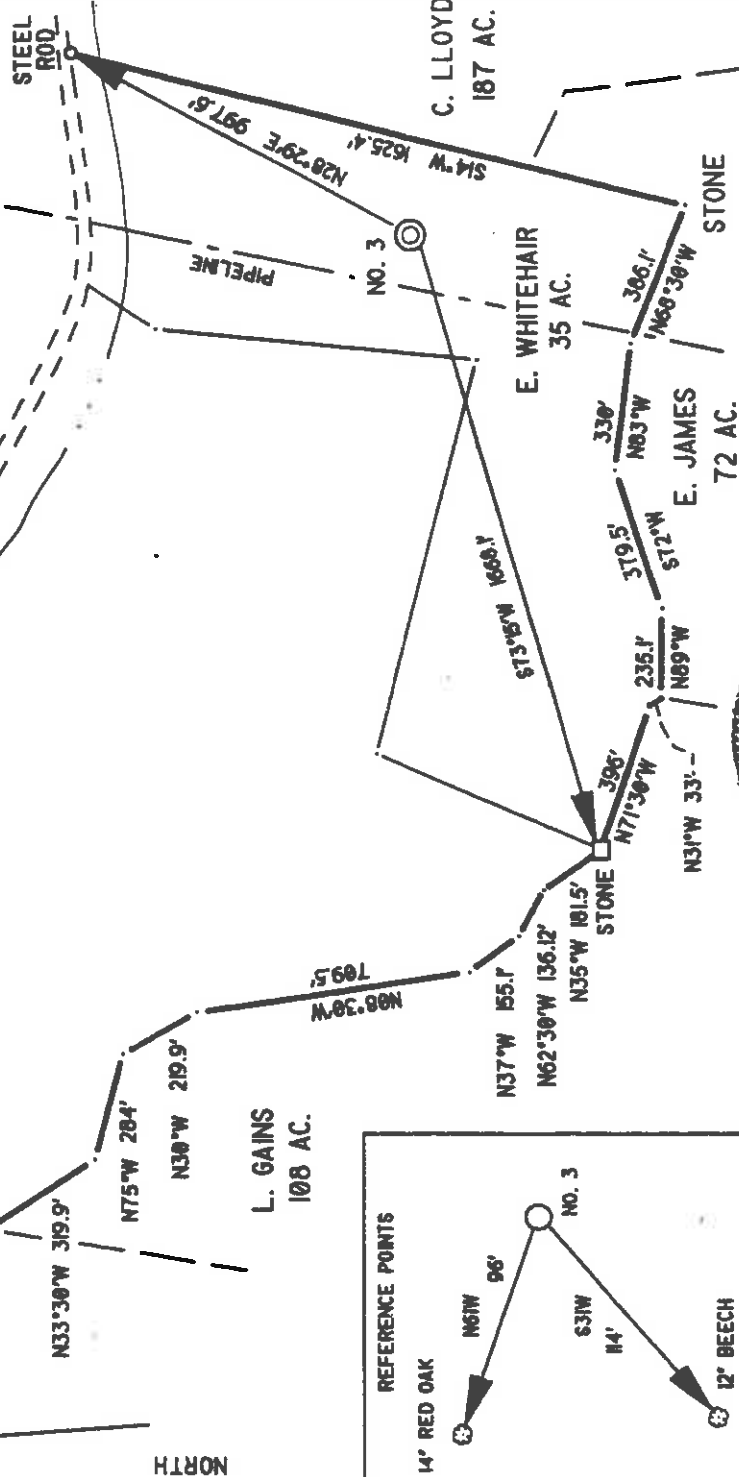
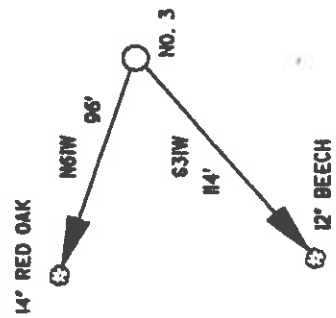
CABIN RUN

O. PRIMM
72 AC.

L. GAINS
108 AC.

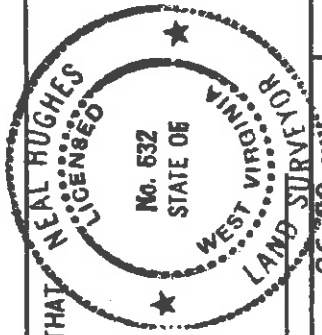
STEEL ROD

REFERENCE POINTS



1.475
1.025

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 FEBRUARY 13 19 97
OPERATORS WELL NO. S. SMITH 3

API WELL NO. 47-017-04368
COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1/200
PROVEN SOURCE OF ELEVATION ROAD INTER 928'
FILE NO. 96-92
SCALE 1" = 500'

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY
OIL AND GAS DIVISION

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

LOCATION: ELEVATION 1088' WATERSHED CABIN RUN

DISTRICT CENTRAL COUNTY DODDRIDGE QUADRANGLE OXFORD
SURFACE OWNER ESTA WHITEHAIR ACREAGE 35
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'

WELL OPERATOR KEY OIL COMPANY
ADDRESS 22 GARTON PLAZA WESTON, WV 26452

DESIGNATED AGENT JAN CHAPMAN
ADDRESS 22 GARTON PLAZA WESTON, WV 26452

COUNTY NAME PERMIT
MAY 20 1997

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: WHITEHAIR, LARRY

Operator Well No. : S. SMITH #3

LOCATION: Elevation: 1,688.00

Quadrangle: OXFORD

District: CENTRAL

County: DODDRIDGE

Latitude: 7750 Feet South of 39 Deg. 15 Min. 0 Sec.

Longitude: 5375 Feet West of 80 Deg. 50 Min. 0 Sec.

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: 08/20/97
Well Work Completed: 09/02/97

Verbal Plugging
Permission granted on: _____
Rotary X Cable _____ Rig

Total Depth (feet) 5460'

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
Balltown
Rileys
Benson

3400' - 3470'
3786' - 4518'
4564' - 4970'
5000' - 5012'
5244' - 5336'

Producing formation Alexander

Gas: Initial open flow show MCF / d Oil: Initial open flow Bbl / d
Final open flow 1,524 MCF / d Oil: Final open flow show Bbl / d
Time of open flow between initial and final tests N/A Hours
Static rock pressure 1500 psig (surface pressure) after 96 Hours

Second producing formation

Gas: Initial open flow MCF / d Commingled 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 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 10, 1998

MAR 06 1998

S. Smith #3 (47-017-04368)
 Four Stage Foam Frac - Halliburton

1st Stage: Alexander (13 holes) (5275.75' to 5323.25') 60 Quality Foam. 500 gal. 15% HCL.
 60,000# 20/40 sand, 550,000 SCF N2,
 813 bbls foam.

2nd Stage: Benson (8 holes) (5006.25' to 5008') 60 Quality Foam. 750 gal 15% HCL.
 Second Riley (4 holes) (4852' to 4852.75') 40,000# 20/40 sand, 417,000 SCF N2,
 618 bbls foam.

3rd Stage: Riley (4 holes) (4605' to 4605.75') 60 Quality Foam. 1000 gal 15% HCL.
 Balltown (11 holes) (4214.5' to 4384') 5,000# 80/100 sand, 45,000# 20/40 sand,
 502,000 SCF N2, 744 bbls foam.

4th Stage: Balltown (9 holes) (3829.75' to 4006.25') 60 Quality Foam. 1000 gal 15% HCL.
 Warren (6 holes) (3409' to 3464') 5,000# 80/100 sand, 45,000# 20/40 sand,
 502,000 SCF N2, 684 bbls foam.

WELL LOG

Fill	0	10	
Red Rock & Sand & Shale	10	137	
Sand	137	215	
Sand & Shale & Red Rock	215	318	
Sand	318	340	
Sand & Shale	340	898	
Shale & Red Rock	898	1026	
Sand & Shale	1026	2030	
Little Lime	2030	2050	
Sand & Shale	2050	2052	
Big Lime	2052	2124	
Big Injun	2124	2179	
Shale	2179	2344	
Weir	2344	2472	
Shale	2472	2939	
Gordon	2939	2949	
Sand & shale	2949	3400	
Warren	3400	3470	
Shale	3470	3480	
Speechley	3480	3600	
Shale	3600	3786	
Balltown	3786	4518	
Shale & Sand	4518	4564	
Riley	4564	4628	
Shale	4628	4792	
Second Riley	4792	4856	
Sand & Shale	4856	4922	
Third Riley	4922	4970	
Shale	4970	5000	
Benson	5000	5012	
Sand & Shale	5012	5244	
Alexander	5244	5336	
Sand & Shale	5336	5460	
T.D.	5460		

Gas Checks

2508' NO SHOW
 3006' NO SHOW
 3625' NO SHOW
 4528' 4/10th 1/2" w/water
 4809' 4/10th 1/2" w/water
 5118' 4/10th 1/2" w/water
 Collars 1/10th 1/2" w/water

Well Log 5/18/12

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

0174368

Well Operator: KEY OIL COMPANY 25651 () 526

Operator's Well Number: SYLVESTER SMITH #3 3) Elevation: 1088'
Well type: (a) Oil X / or Gas X / *Issued 05/27/99*
(b) If Gas: Production X / Underground Storage / *Expires 05/27/99*
Deep / Shallow X /

Proposed Target Formation(s): ALEXANDER 439

6) Proposed Total Depth: 5600 feet
7) Approximate fresh water strata depths: 90'
8) Approximate salt water depths: 543', 1282'
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

RECEIVED
WV Division of
Environmental Protection
MAY 23 1999
Permitting
Office of Oil & Gas

CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS	FOOTAGE INTERVALS	CEMENT			
	Size	Grade	Weight per ft.	For drilling	Left in well	Fill-up (cu. ft.)
Conductor						
Fresh Water	11 3/4	ERW	42	132	132	70 SKS. TO SURFACE
Coal						555 SKS TO SURFACE
Intermediate	8 5/8	ERW	23	2050	2050	490 SKS.
Production	4 1/2	J-55	10.5		5500	
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 WPC2
 Plat WW-9 WW-2B Bond _____ (Type) _____

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

Date: MAY 12, 1997
Operator's well number
SYLVESTER SMITH #3
API Well No: 47 - 017 - 4368
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 LARRY WHITEHAIR Name NONE
Address RT. 1 BOX 211A Address
WEST UNION, WV 26456

(b) Name _____ (b) Coal Owner(s) with Declaration
Address _____ Name _____
Address _____

(c) Name _____ Name _____
Address _____ Address _____

6) Inspector MIKE LINDERWOOD (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]*
 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