

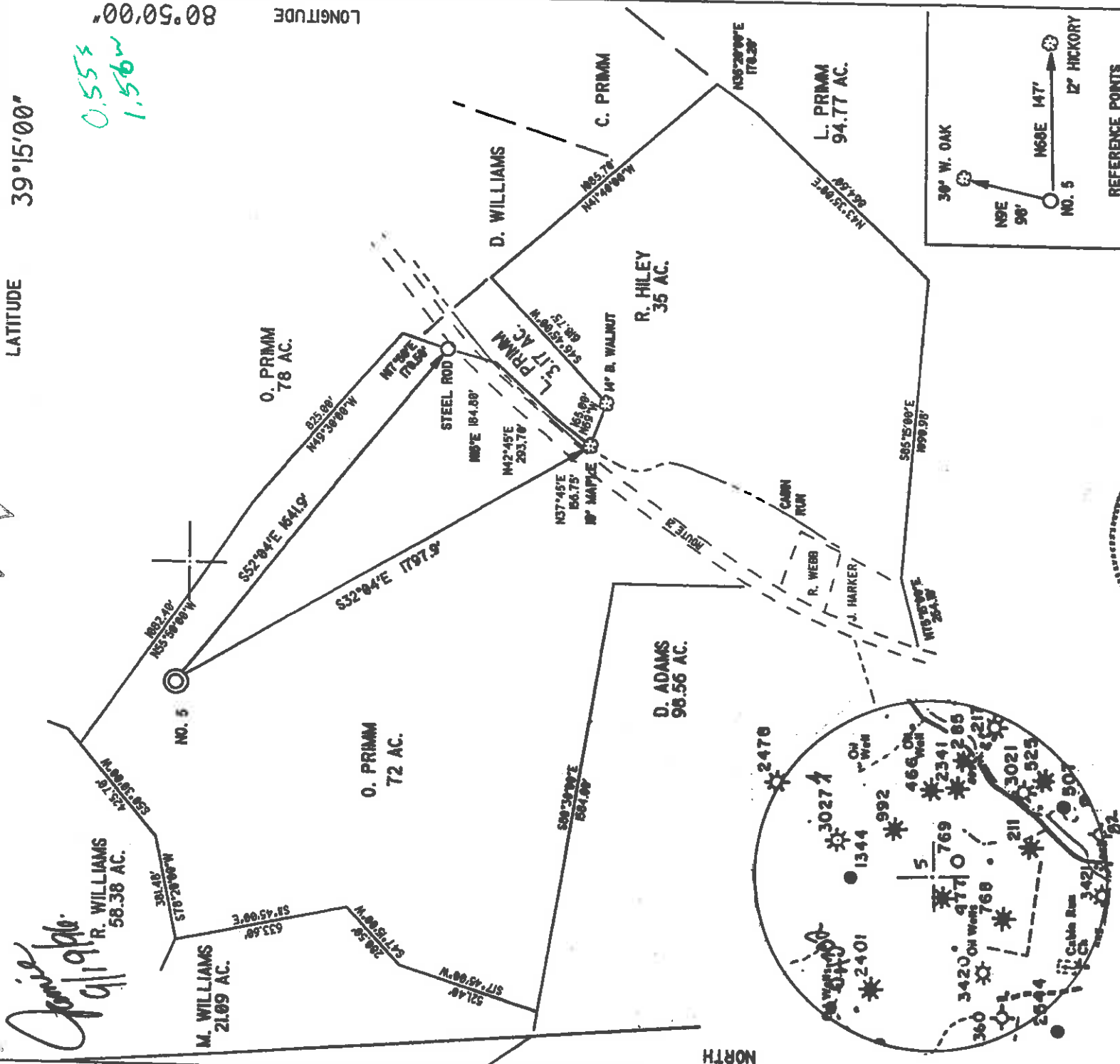
LATITUDE 39°15'00"

LONGITUDE 80°50'00"

0.553
1.56w

8,200'

7,850'



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
 NEAL HUGHES
 LICENSED
 STATE OF WEST VIRGINIA
 LAND SURVEYOR

MINIMUM DEGREE OF ACCURACY 1/200 FILE NO. 96-68
 PROVEN SOURCE OF ELEVATION ROAD INTERSECTION 868' SCALE 1" = 500'

WELL TYPE: OIL GAS LIQUID WASTE DISPOSAL IF "GAS" PRODUCTION STORAGE DEEP SHALLOW
 LOCATION: ELEVATION 1105' WATERSHED CABIN RUN
 DISTRICT CENTRAL COUNTY DODDRIDGE QUADRANGLE OXFORD
 SURFACE OWNER OLIN PRIMM ACREAGE 72
 ROYALTY OWNER RALPH LEGGETT HEIRS LEASE ACREAGE 72
 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
 STATE OF WEST VIRGINIA
 DEPARTMENT OF ENERGY
 OIL AND GAS DIVISION
 API WELL NO. 47-017-04301 COUNTY PET. #11
 DESIGNATED AGENT JAN CHAPMAN
 ADDRESS 22 GARTON PLAZA WESTON, WY 26452
 ADDRESS 22 GARTON PLAZA WESTON, WY 26452

REC

Environmental
APR 1

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

Operator Well No.: LEGGETT #5

LOCATION: Elevation: 1,105.00 Quadrangle: OXFORD

District: CENTRAL County: DODDRIDGE
Latitude: 2850 Feet South of 39 Deg. 15 Min. 0 Sec.
Longitude: 8200 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: 09/16/96
Well Work Commenced: 09/18/96
Well Work Completed: 09/30/96
Verbal Plugging
Permission granted on: _____
Rotary X Cable _____ Rig
Total Depth (feet) 5540'
Fresh water depths (ft) 78'
Salt water depths (ft) 1787'

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

OPEN FLOW DATA

Producing formation Elk, Alexander Balltown 3866' - 4606'
Gas: Initial open flow 15 MCF / d Riley 4624' - 4696'
Final open flow 1.638 MCF / d Benson 5052' - 5066'
Time of open flow between initial and final tests N/A Pay zone depth (ft) 5251' - 5386'
Static rock pressure 1650 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 PERFORMED 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: 
Date: 3-26-97

PRESIDENT

APR 28 1997

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
11 3/4"	123.45	123.45	70 sks To Surface
8 5/8"	2097.3	2097.3	610 sks To Surface
4 1/2"	5455	5455	460 sks
2 3/8"		5307	

Leggett #5 (47-017-04301)
Four Stage Foam Frac - Halliburton

1st Stage: Alexander (11 holes) (5327.25' - 5375.5') 60 Quality Foam. 500 gal. 15% HCL.
Elk (2 holes) (5259.75' - 5260') 60,000# 20/40 sand, 550,000 SCF N2,
813 blis foam.

2nd Stage: Benson (10 holes) (5057.5' - 5059.75') 60 Quality Foam. 750 gal 15% HCL.
35,000# 20/40 sand, 394,000 SCF N2,
570 blis foam.

3rd Stage: Riley (8 holes) (4646' - 4664.5') 60 Quality Foam. 1000 gal 15% HCL.
Balltown (3 holes) (4564.25' - 4570') 10,000# 80/100 sand, 30,000# 20/40 sand,
508,000 SCF N2, 550 blis foam.

4th Stage: Balltown (9 holes) (4051.75' - 4198.5') 60 Quality Foam, 1,000 gal 15% HCL.
5,000# 80/100 sand, 35,000# 20/40 sand,
390,000 SCF N2, 589 blis foam.

WELL LOG

Fill	0	5	
Sand & Shale	5	15	
Sand	15	25	
Sand & Shale & Red Rock	25	573	Damp @ 78'
Sand	573	649	
Shale & Red Rock	649	862	
Sand & Shale & Red Rock	862	1233	
Sand & Shale	1233	1332	
Lime	1332	1351	
Sand & Shale	1351	1386	
Lime & Shale	1386	1459	
Sand & Shale	1459	2130	
Big Lime	2130	2191	
Big Injun	2191	2251	
Shale	2251	2419	
Weir	2419	2548	
Shale	2548	2609	
Berea	2609	2615	
Sand & Shale	2615	3494	
Warren	3494	3544	
Shale	3544	3556	
Speechley	3556	3679	
Shale	3679	3866	
Balltown	3866	4606	
Shale & Sand	4606	4624	
Riley	4624	4696	
Shale	4696	5052	
Benson	5052	5066	
Sand & Shale	5066	5251	
Elk	5251	5265	
Shale	5265	5303	
Alexander	5303	5386	
Sand & Shale	5386	5540	
T.D.	5540		

1/4" stream H²O @ 1787'

Gas Checks

2567' No Show
3000' No Show
3805' No Show
4327' 4/10ths 1/2" w/H²O
4914' 2/10ths 1" w/H²O
TD 4/10ths 1" w/H²O
Collars 2/10ths 1" w/H²O

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

Well Operator: KEY OIL COMPANY 75455 0 526

Operator's Well Number: LEGGETT #5 3) Elevation: 1105'

Well type: (a) OIL X / or Gas X / Dated: 09/16/96
 (b) If Gas: Production X / Underground Storage / Shallow X / Deep / Expires: 09/16/98

Proposed Target Formation(s): ALEXANDER 439

6) Proposed Total Depth: 5600 feet

7) Approximate fresh water strata depths: 90'

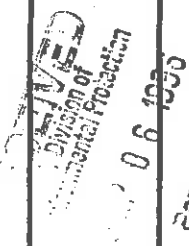
8) Approximate salt water depths: 1771'

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 [Signature]

12)



CASING AND TUBING PROGRAM

TYPE SPECIFICATIONS FOOTAGE INTERVALS CEMENT

TYPE	Size	Grade	Weight per ft. drilling	For drilling	Left in well	Fill-up (cu. ft.)
Conductor						
Fresh Water	11 3/4	ERW	42	132	132	3859.141.3
Coal						70 SKS. TO SURFACE
Intermediate	8 5/8	ERW	23	2045	2045	3859.141.3
Production	4 1/2	J-55	10.5	5500	5500	550 SKS. TO SURFACE
Tubing	1.5					400SKS.
Liners						3859.141.1

PACKERS : Kind _____
 Sizes _____
 Depths set _____

For Office of Oil and Gas Use Only
 Fee(s) paid: [Signature] Well Work Permit [Signature] Reclamation Fund [Signature] WPCP Agent
 Plat [Signature] WW-9 [Signature] Bond [Signature] (Type) [Signature]

1) Date: 9-4-96
2) Operator's well number
LEGETT #5
3) API Well No: 47 - 017 - 4301
State County Permit

Permitting
Office of Oil & Gas
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 OLIN PRIMM Name NONE
Address RT. 1 Address
WEST UNION, WV 26456

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

Walt Operator KEY OIL COMPANY
BY: _____
Its: PRESIDENT
Address 22 GARTON PLAZA
WESTON, WV 26452
Telephone 304-269-7102
4TH day of SEPTEMBER, 19 96

Subscribed and sworn before me this _____ 19 96
My commission expires MARCH 24, 2003
Karen Cook Notary Public

