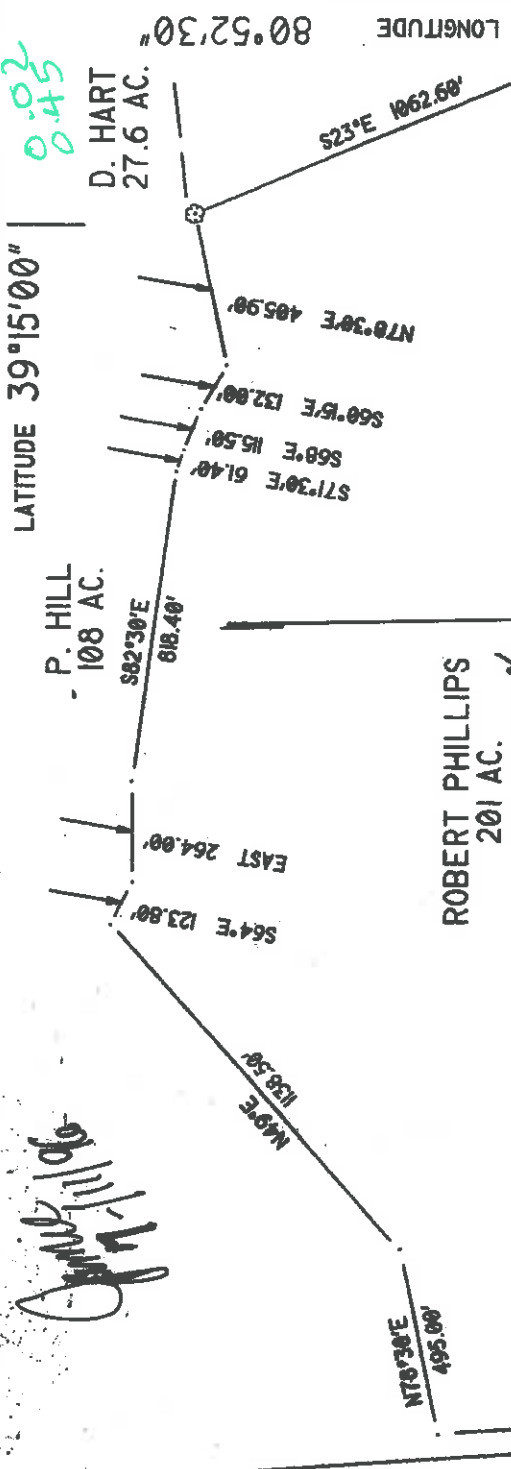


Neal Hughes

LATITUDE 39°15'00"

2,350'



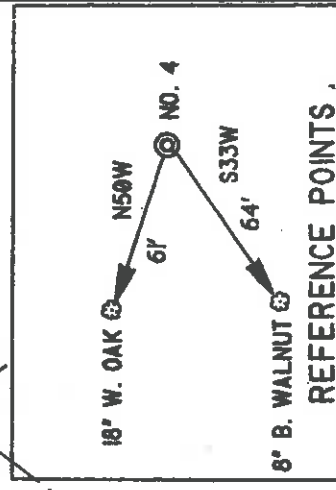
TWIN C. OAK ON RIDGE
S06°36'W 633.60'

E. SHEETS
191 AC.

P. HILL
108 AC.

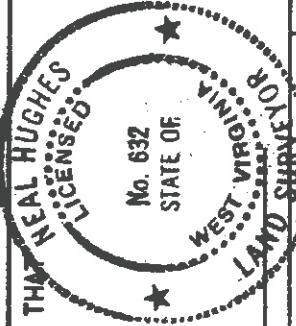
ROBERT PHILLIPS
201 AC.

E. ADAMS
RUN



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



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

DATE MAY 21 19 96
OPERATORS WELL NO. HUDKINS 4

LLS Neal Hughes
632

API WELL NO. 47 - 017-04284
STATE WEST VIRGINIA COUNTY PERMIT

FILE NO. 96m14
SCALE 1" = 500'

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY
OIL AND GAS DIVISION

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL 'GAS' PRODUCTION STORAGE DEEP SHALLOW
 LOCATION: ELEVATION 865' WATERSHED LEASON RUN
 DISTRICT CENTRAL COUNTY DODDRIDGE QUADRANGLE PULLMAN
 SURFACE OWNER ROBERT PHILLIPS ACREAGE 201
 ROYALTY OWNER RAY HUDKINS HEIRS LEASE ACREAGE 201
 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 475 DESIGNATED AGENT JAN CHAPMAN 10/17/1996
 ADDRESS 22 GARTON PLAZA ADDRESS 6-6 89
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: PHILLIPS, ROBERT E.

Operator Well No.: HUDKINS #4

LOCATION: Elevation: 865.00

Quadrangle: PULLMAN

District: CENTRAL
Latitude: 50
Longitude: 2350

County: DODDRIDGE
Feet South of 39 Deg. 15 Min. 00 Sec.
Feet West of 80 Deg. 52 Min. 30 Sec.

Company: KEY OIL COMPANY
22 GARTON PLAZA
WESTON, WV 26452-0000

Agent: JAN E. CHAPMAN

Inspector: MIKE UNDERWOOD
Permit issued: 07/11/96
Well Work Commenced: 08/05/96
Well Work Completed: 08/19/96

Verbal Plugging
Permission granted on: _____
Rotary X Cable _____ Rig _____
Total Depth (feet) 5250'
Fresh water depths (ft) 20'
Salt water depths (ft) 781'

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

OPEN FLOW DATA

Balltown
Riley
Second Riley
Benson
Elk

3652' - 4223'
4357' - 4440'
4616' - 4650'
4780' - 4976'
4979' - 4990'

Producing formation Alexander
Gas: Initial open flow 15 MCF / d
Final open flow 1,586 MCF / d
Time of open flow between initial and final tests N/A
Static rock pressure 1790 psig (surface pressure) after 96 Hours

Pay zone depth (ft) 5028' - 5104'
Oil: Initial open flow 0 Bbl / d
Oil: Final open flow show Bbl / d
Hours _____
Hours _____

Second producing formation Comingled
Gas: Initial open flow _____ MCF / d
Final open flow _____ MCF / d
Time of open flow between initial and final tests _____
Static rock pressure _____ psig (surface pressure) after _____ Hours

Pay zone depth (ft) _____
Oil: Initial open flow _____ Bbl / d
Oil: Final open flow _____ Bbl / d
Hours _____
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: JANUARY 22, 1997
FEB 14 1997

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
8 5/8"	877.65'	877.65'	235 sks
4 1/2"		5168'	To surface 470 sks
2 3/8"		5042'	

Hudkins #4 (47-017-04284)
Four Stage Foam Frac - Halliburton

1st Stage:	Alexander (9 holes) (5062.25' - 5099.50') Elk (3 holes) (4986.75' - 4987.25')	60 Quality Foam. 500 gal. 15% HCL. 60,000# 20/40 sand, 550,000 SCF N2, 808 bbls foam.
2nd Stage:	Benson (8 holes) (4726.25' - 4789') 2nd Riley (3 holes) (4645.75' - 4646.25')	60 Quality Foam. 750 gal 15% HCL. 35,000# 20/40 sand, 428,000 SCF N2, 515 bbls foam.
3rd Stage:	Riley (9 holes) (4359.50' - 4400.50') Balltown (4 holes) (4202.75' - 4220.50')	60 Quality Foam. 1000 gal 15% HCL. 10,000# 80/100 sand, 30,000# 20/40 sand, 508,000 SCF N2, 549 bbls foam.
4th Stage:	Balltown (13 holes) (3666.50' - 3878.25')	60 Quality Foam, 1,000 gal 15% HCL. 10,000# 80/100 sand, 40,000# 20/40 sand, 473,000 SCF N2, 695 bbls foam.

WELL LOG

FORMATION	Top Feet	Bottom Feet	Remarks
Fill	0	5	
Clay	5	15	
Shale	15	40	
Shale & Red Rock	40	936	Damp @ 20'
Sand & Shale	936	1756	Damp @ 781'
Maxon	1756	1776	
Shale	1776	1789	
Little Lime	1789	1816	
Pencil Cave	1816	1832	
Big Lime	1832	1902	
Big Injun	1902	1965	
Shale	1965	2138	
Weir	2138	2266	
Shale	2266	2324	
Berea	2324	2328	
Shale & Sand	2328	3204	
Warren	3204	3278	
Sand & Shale	3278	3652	
Balltown	3652	4223	
Shale	4223	4357	
Riley	4357	4440	
Shale	4440	4616	
2nd Riley	4616	4650	
Shale	4650	4704	
3rd Riley	4704	4754	
Shale	4754	4780	
Benson	4780	4796	
Shale	4796	4979	
Elk	4979	4990	
Shale	4990	5028	
Alexander	5028	5104	
Sand & Shale	5104	5250	
T.D.	5250		

Gas Checks

1714' - No Show
1901' - 2/10ths 1/4" H2O
2525' - No Show
3024' - No Show
3522' - No Show
4020' - 6/10ths 1" H2O
4517' - 6/10th 1" H2O
T.D. - 2/10ths 1" H2O

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

Well Operator: KEY OIL COMPANY 25655 0 562
 Operator's Well Number: HUDKINS #4 3) Elevation: 865'

Well type: (a) Oil X / or Gas X / Issued 07/11/96
 (b) If Gas: Production X / Undergroud Storage 1 Expires 07/11/98
 Deep 435 / Shallow X /

Proposed Target Formation(s): ALEXANDER

6) Proposed Total Depth: 5400' feet

7) Approximate fresh water strata depths: 80', 150'

8) Approximate salt water depths: -0-

9) Approximate coal seam depths: NONE

10) Does land contain coal seams tributary to active mine? Yes 1 No X /

11) Proposed Well Work: DRILL, STIMULATE, PRODUCE Four Well

12)

RECEIVED
 WV Division of
 Environmental Protection
 JUL 23 1996
 Permitting
 Office of Oil & Gas

CASING AND TUBING PROGRAM

TYPE	SIZE	GRADE	WEIGHT PER FT. DRILLING	FOOTAGE INTERVALS	CEMENT
Conductor	11 3/4	ERW	42	30	0
Fresh Water	8 5/8	ERW	23	865	865
Coal					235 SKS. TO SURFACE
Intermediate					305 SKS 11.3
Production	4 1/2	J-55	10.5	5250	355 SKS.
Tubing	1.5				305 SKS 11.1
Liners					

PACKERS : Kind _____
 Sizes _____
 Depths set _____

FOR Office of Oil and Gas Use Only
 Fee(s) paid: 100 | Well Work Permit 100 | Reclamation Fund 100 | WPCP
 Plat 100 | WW-9 100 | WW-2B 100 | Bond 100 | Agent 100
 (Type)

RECEIVED
WV Division of
Environmental Protection

JUN 25 1996

1) Date: JUNE 3, 1996
2) Operator's well number HUDKINS #4
3) APT Well No: 47 - 017 - 4284
State County Permit

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

25655/1/561

NOTICE AND APPLICATION FOR A WELL WORK PERMIT

- 4) Surface Owner(s) to be served:
- (a) Name ROBERT E. PHILLIPS 5) (a) Coal Operator: Name NONE
Address RT. 1 BOX 44A Address _____
GREENWOOD, WV 26360
- (b) Name _____ (b) Coal Owner(s) with Declaration Name _____
Address _____ Address _____
- (c) Name _____ Name _____
Address _____ Address _____
- 6) Inspector MIKE UNDERWOOD (c) Coal Lessee with Declaration Name _____
Address RT. 2 BOX 135 Address _____
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.

Well Operator KEY OIL COMPANY

JAN CHAPMAN



OFFICIAL SEAL NOTARY PUBLIC
STATE OF WEST VIRGINIA
KAREN COOK
ROUTE 2, BOX 1
JANE LEW, WV 26378
My Commission Expires Mar. 24, 2003

By: [Signature] PRESIDENT
Its: [Signature] KEY OIL COMPANY
Address 22 GARTON PLAZA
WESTON, WV 26452
Telephone 304-269-7102

Subscribed and sworn before me this 3RD day of JUNE, 1996
Notary Public

My commission expires MARCH 24, 2003