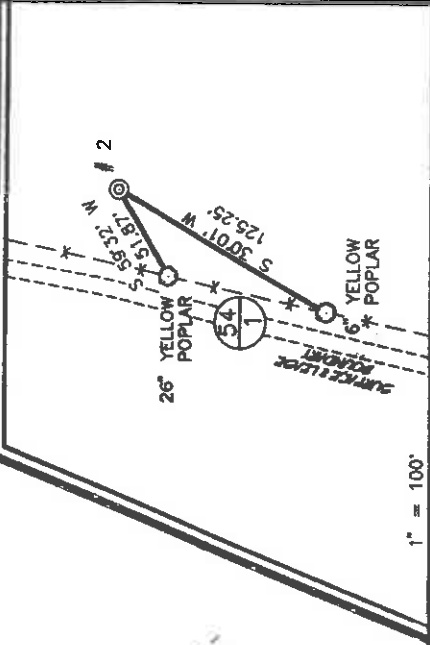
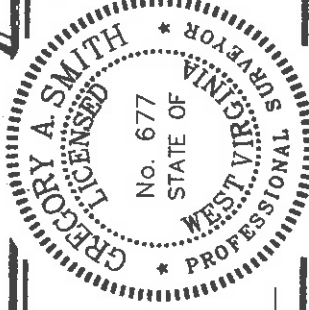


REFERENCES



I THE UNDERSIGNED, 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.



P.S. *Gregory A. Smith*
677

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.
DATE OCTOBER 25, 19 96
OPERATORS WELL NO. HUDAK # 2
API WELL NO. 47-017-04320 COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 200 FILE NO. 3609P2 (58-53)
PROVEN SOURCE OF ELEVATION JUNCTION OF ROADS ELEVATION 1003' SCALE 1" = 500'

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY
OIL AND GAS DIVISION



WELL TYPE : OIL GAS INJECTION WASTE DISPOSAL "GAS" PRODUCTION STORAGE DEEP SHALLOW
LOCATION : ELEVATION 1063' WATERSHED SOUTH FORK HUGHES RIVER

DISTRICT SOUTHWEST COUNTY DODDRIDGE QUADRANGLE NEW MILTON 7.5'
SURFACE OWNER EDWARD HUDAK ACREAGE 75
ROYALTY OWNER EDWARD HUDAK ET.AL. LEASE ACREAGE 75 LEASE NO. _____

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 DEVONIAN SHALE
ESTIMATED DEPTH 5900'

WELL OPERATOR KEY OIL COMPANY DESIGNATED AGENT JAN CHAPMAN NOV 8 1996
ADDRESS 22 GARTON PLAZA WESTON, WV 26452 ADDRESS 22 GARTON PLAZA WESTON, WV 26452

677-134

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

RECEIVED
Environmental Protection

Well Operator's Report of Well Work

Farm name: HUDAK, ED

Operator Well No.: HUDAK #2

LOCATION: Elevation: 1,063.00

Quadrangle: OXFORD

District: SOUTHWEST
Latitude: 8690 Feet South of 39 Deg. 12 Min. 30 Sec.
Longitude: 11380 Feet West of 80 Deg. 42 Min. 30 Sec.

County: DODDRIDGE
Office of Oil & Gas

Permitting

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

Agent: JAN E. CHAPMAN

Inspector: MIKE UNDERWOOD
Permit Issued: 11/07/96
Well Work Commenced: 12/12/96
Well Work Completed: 12/23/96
Verbal Plugging
Permission granted on: _____
Rotary X Cable _____ Rig
Total Depth (feet) 5436'
Fresh water depths (ft) 50'
Salt water depths (ft) 213', 1950'

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

OPEN FLOW DATA

Warren
Speechley
Balltown
Rileys
Benson
Producing formation Alexander
Gas: Initial open flow 15 MCF / d
Final open flow 1,540 MCF / d
Time of open flow between initial and final tests N/A
Static rock pressure 1600 psig (surface pressure) after 96 Hours
Pay zone depth (ft) 5149' - 5256'
Oil: Initial open flow 0 Bbl / d
Oil: Final open flow show Bbl / d

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
11 3/4"	128.65	128.65	70 sks To Surface
8 5/8"	1946.2	1946.2	565 sks To Surface
4 1/2"	5316	5316	460 sks
2 3/8"		5175	

Second producing formation

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

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: 
Date: 4-22-97

PRESIDENT

MAY 24 1997

Hudak #2 (47-017-04320)
Four Stage Foam Frac - Halliburton

1st Stage:	Alexander (11 holes) (5195.25' - 5243.5')	60 Quality Foam, 500 gal, 15% HCL, 40,000# 20/40 sand, 421,000 SCF N2, 621 bbis foam.
2nd Stage:	Benson (7 holes) (4900.5' - 4902') Third Riley (4 holes) (4812.75' - 4813.5')	60 Quality Foam, 750 gal 15% HCL, 40,000# 20/40 sand, 417,000 SCF N2, 615 bbis foam.
3rd Stage:	Riley (7 holes) (4464' - 4477.25') Balltown (5 holes) (4041' - 4042')	60 Quality Foam, 1000 gal 15% HCL, 5,000# 80/100 sand, 35,000# 20/40 sand, 438,000 SCF N2, 646 bbis foam.
4th Stage:	Speechley (9 holes) (3330' - 3402.5') Warren (4 holes) (3280.75' - 3287.75')	60 Quality Foam, 1000 gal 15% HCL, 5,000# 80/100 sand, 55,000# 20/40 sand, 522,000 SCF N2, 779 bbis foam.

WELL LOG

Fill	0	5	
Sand & Shale	5	100	1" H ₂ O @ 50'
Red Rock & Sand & Shale	100	267	1/2" H ₂ O @ 213'
White Sand	267	314	
Sand & Shale & Red Rock	314	507	
Sand	507	572	
Sand & Shale & Red Rock	572	1172	
Lime	1172	1174	
Sand & Shale	1174	1270	
Lime	1270	1273	
Sand & Shale & Lime	1273	1391	
White Sand	1391	1456	
Sand & Shale	1456	1614	
Sand	1614	1674	
Sand & Shale	1674	1907	
Maxon	1907	1933	
Big Lime	1933	1978	
Big Injun	1978	2064	
Shale	2064	2193	
Weir	2193	2295	
Shale	2295	2398	
Berea	2398	2414	
Shale	2414	2602	
Gordon	2602	2631	
Shale	2631	3239	
Warren	3239	3301	
Shale	3301	3310	
Speechley	3310	3536	
Shale	3536	3564	
Balltown	3564	4255	
Shale	4255	4438	
Riley	4438	4502	
Shale	4502	4797	
3 rd Riley	4797	4831	
Shale	4831	4897	
Benson	4897	4907	
Shale	4907	5149	
Alexander	5149	5256	
Shale	5256	5436	
T.D.	5436		

1/2" H₂O @ 1950'

Gas Checks

2507'	4/10ths 1" w/H ₂ O
3028'	11/10ths 1" w/H ₂ O
3709'	4/10ths 1" w/H ₂ O
4417'	4/10ths 1" w/H ₂ O
4819'	4/10ths 1" w/H ₂ O
5131'	10/10ths 1" w/H ₂ O
TD	7/10ths 1" w/H ₂ O
Collars	2/10ths 1" w/H ₂ O

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

1) Well Operator: KEY OIL COMPANY 25655 1 511 017 4390

2) Operator's Well Number: HUDAK #2 3) Elevation: 1063'

Well type: (a) Oil X / or Gas X / Issued 11/07/96

(b) If Gas: Production X / Underground Storage / Shallow X /
 Deep / Expenses 11/07/98

Proposed Target Formation(s): ALEXANDER⁴³⁹

Proposed Total Depth: 5500 feet

Approximate fresh water strata depths: 75'

Approximate salt water depths: 1396'

Approximate coal seam depths: N/A

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

Proposed Well Work: DRILL, STIMULATE, PRODUCE Spilled

CASING AND TUBING PROGRAM

TYPE	SIZE	GRADE	WEIGHT PER FT.	FOOTAGE	LEFT IN WELL	FILL-UP (cu. ft.)	CEMENT
Conductor							
Fresh Water	11 3/4	ERW	42	132	132	3005/11.3	
Coal						70 SKS. TO SURFACE	
Intermediate	8 5/8	ERW	23	1570	1570	3005/11.2.2	
Production	4 1/2	J-55	10.5	5450	5450	425 SKS. TO SURFACE	
Tubing	1.5					500 SKS.	
Liners						3005/11.1	

PACKERS : Kind _____
 Sizes _____
 Depths set _____

05/97
 For Office of Oil and Gas Use Only
 Fee(s) paid: 25 Well Work Permit 25 Reclamation Fund 25 WPCP
 Plat 25 MW-9 25 MW-2B 25 Bond 25 Agent
 (Type)

1) Date: NOVEMBER 1, 1996
2) Operator's well number
HUDAK #2
3) API Well No: 47-017 - 4320
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: Name NONE Address _____
(a) Name ED HUDAK Address P. O. BOX 338
WEST UNION, WV 26456
(b) Coal Owner(s) with Declaration Name _____ Address _____
(b) Name _____ Address _____
(c) Name _____ Address _____
Inspector MIKE UNDERWOOD (c) Coal Lessee with Declaration Name _____ Address _____
Address RT. 2 BOX 135 Name _____ Address _____
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 1ST day of NOVEMBER, 1996
Karen Cook Notary Public
My commission expires MARCH 24, 2003