

Gomie 5/11/89

9900'

45

LATITUDE 37°42'30"

LONGITUDE 81°47'30"

13,300'

NORTH

R.P.
Nail in base of 24"
Poplar at foot of
high wall

R.P.
Nail in root of 16"
Poplar at edge
strip

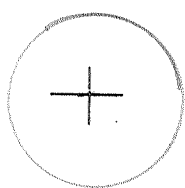
C S X MINERALS

Permit 703

Permit 295

Permit 705

(Sigs)
Elk Creek Coal Land Co.
TR I 5639.84 AC.
DB 362 PG 298



2.50
1.87

TRIADDELPHIA DIST.
STAFFORD DIST.
LOC 24 O
LOGAN CO. J
MINGO CO.
RITTER COORD. AT LOC.
N 110,992.51'
W 79,703.33

Set Stone
Top knob

CLEARFORK DIST.
WYOMING CO.

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

FILE NO. _____
DRAWING NO. _____
SCALE 1"=1000'
MINIMUM DEGREE OF
ACCURACY 1:5500'
PROVEN SOURCE OF
ELEVATION USC & GS BM 6162
Mouth Elk Creek EL 774.51'

I THE UNDERSIGNED, 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 REGU-
LATIONS ISSUED AND PRESCRIBED BY THE DEPART-
MENT OF ENERGY.
(SIGNED) G. J. Volley Jr.
R.P.E. _____ J.L.S. 92

PLACE SEAL HERE

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY
OIL AND GAS DIVISION



DATE APRIL 17, 1989
OPERATOR'S WELL NO. 25-ser. 118021
API WELL NO. Elk Creek Coal Land Co.

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
(IF "GAS,") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X

LOCATION: ELEVATION 1707.12 WATERSHED ELK CREEK OF GUYAN RIVER
DISTRICT TRIADDELPHIA 3 COUNTY LOGAN
QUADRANGLE MALLORY 454 0493 Gilbert NE

SURFACE OWNER GEORGIA PACIFIC CORP. ACREAGE 7000
OIL & GAS ROYALTY OWNER ISLAND CREEK CORP. LEASE ACREAGE 7600
LEASE NO. 5658

PROPOSED WORK: DRILL X CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR
STIMULATE X PLUG OFF OLD FORMATION ___ PERFORATE NEW
FORMATION ___ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____

PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___
TARGET FORMATION DEVONIAN SHALE ESTIMATED DEPTH 6012'

WELL OPERATOR ASHLAND EXPLORATION INC. DESIGNATED AGENT FORREST BURKETT
ADDRESS P.O. BOX 391 ASHLAND KY 41114 ADDRESS P.O. BOX 379 BRENTON WV 24818

MAY 26 1989

DEEP WELL 6-6 Man-Oceana (266)

COUNTY NAME
PERMIT

NOV 03 1989

State of West Virginia
DEPARTMENT OF ENERGY
Division of Oil and Gas

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

Well Operator's Report of Well Work

Farm name: GEORGIA-PACIFIC CORP. Operator Well No.: ELK 25-S-118021

LOCATION: Elevation: 1707.12 Quadrangle: MALLORY

District: TRIADELPHIA County: LOGAN
Latitude: 13300 Feet South of 37 Deg. 42Min. 30 Sec.
Longitude 9900 Feet West of 81 Deg. 47 Min. 30 Sec.

Company: ASHLAND EXPLORATION, INC.
P. O. BOX 391
ASHLAND, KY 41114-0000

Agent: FORREST BURKETT

Inspector: TIM BENNETT
Permit Issued: 05/23/89
Well work Commenced: 8/14/89
Well work Completed: 10/25/89
Verbal Plugging
Permission granted on:
Rotary X Cable _____ Rig _____
Total Depth (feet) 6070'
Fresh water depths (ft) 489,817
approximately
Salt water depths (ft) Approximate
2057'
Is coal being mined in area (Y/N)? X
Coal Depths (ft): Open mine 67-69,
334-338, 363,369,379-382

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
16"	30'	30'	14
11 3/4"	151'	151'	118
8 5/8"	2525'	2525'	802
5 1/2"	6015'	6015'	569
1.9" @ 5827' w/ADL-1 Pkr @ 3904'			
1.9" @ 3860'			

OPEN FLOW DATA

Producing formation Devonian Shale Pay zone depth (ft) 4968-5901
 Gas: Initial open flow 0/45 MCF/d Oil: Initial open flow _____ Bbl/d
 Final open flow 310/1022 MCF/d Final open flow _____ Bbl/d
 Time of open flow between initial and final tests 3 Hours
 Static rock Pressure 450 psig (surface pressure) after 72 Hours
 Berea 3862-3882
 Second producing formation Big Lime Pay zone depth (ft) 3058-3270
 Gas: Initial open flow 45 MCF/d Oil: Initial open flow _____ Bbl/d
 Final open flow 712 MCF/d Final open flow _____ Bbl/d
 Time of open flow between initial and final tests 3 Hours
 Static rock Pressure 490 psig (surface pressure) after 72 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: ASHLAND EXPLORATION, INC.

By: James L. Stephens James L. Stephens, Engineering Tech.
Date: November 2, 1989

NOV 09 1989

<u>FORMATION</u>	<u>TOP</u>	<u>BASE:</u>
SAND & SHALE	0	1374
LOWER LEE SAND	1374	2042
SAND & SHALE	2042	2122
RAVENSCLIFF	2122	2277
SHALE	2277	2305
UPPER MAXTON	2305	2457
SHALE	2457	2537
MIDDLE MAXTON	2537	2705
SAND & SHALE	2705	2831
LOWER MAXTON	2831	2857
SHALE	2857	2897
LITTLE LIME	2897	2959
PENCIL CAVE	2959	2966
BIG LIME	2966	3297
SHALE	3297	3383
WEIR SECTION	3383	3495
SHALE	3495	3831
COFFEE SHALE	3831	3856
BEREA	3856	3891
DEVONIAN SHALE	3891	6055
ONONDAGA LS	6055	TD

RECEIVED
NOV 03 1985

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

EST
UD 3856

H 4930

J 5300

A 5530

Rh 5780

DTD 6070
LTD 6074

WELL TREATMENT

Perf Lower Dev. Shale 25H/5753-5901 - 75 Q foam frac using 500 gal 13% inh Fe acid, 1000 gal 25% treated Methanol, 92,000# 20/40 sand & 880,000 SCF N₂ @ 30,000 SCF/min. BD @ 2670#, ATP 2550# @ 50 bpm foam rate, MTP 2640#, ISIP 1850#, 15 min 1550#, TSLF 313 bbls. & 374 bbls.

Perf Upper Dev. Shale 25H/4968-5396 - 75 Q foam frac using 1000 gal 8% inh Fe acid, 1000 gal 25% treated Methanol, 97,000# 20/40 sand & 600,000 SCF N₂ @ 20,500 SCF/min. BD @ 1630#, ATP 2050# @ 54.6 bpm, MTP 2400#, ISIP 2350#, 15 min 2280#, TSLF 351 bbls & TF 409 bbls.

Perf Berea 40H/3862-3882. 75 Q foam frac using 500 gal 16% inh Fe acid, 49,200# 20/40 sand & 325,000 SCF N₂ @ 9200 SCF/min. BD @ 991#, ATP 950# @ 25 bpm foam rate, MTP 1128#, ISIP 702#, 15 min 654# & TF 290 bbls.

Perf Big Lime 36H/3058-3270. Acidize Big Lime using 3000 gal 28% inh Fe acid, 3000 gal 15% inh Fe acid. BD @ 700#, ATP 600# @ 6 bpm, MTP 1300#, ISIP 0# & TF 234 bbls.

ESPP

20

045-1139

Issued 5/23/89 Expired 5/23/91

Page 1 of 1

FORM WW-2B

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS
WELL WORK PERMIT APPLICATION

- 1) Well Operator: Ashland Exploration, Inc. 2750, 3, 454
Elk Creek Coal Land Co.
- 2) Operator's Well Number: 25, Serial #118021 3) Elevation: 1707.12
- 4) Well type: (a) Oil / or Gas X /
(b) If Gas: Production X / Underground Storage /
Deep / Shallow X /
- 5) Proposed Target Formation(s): Devonian Shale
- 6) Proposed Total Depth: 6012'KB feet
- 7) Approximate fresh water strata depths: 817'KB
- 8) Approximate salt water depths: 2057'KB
Lower Cedar Grove-42' (Mined Out)
- 9) Approximate coal seam depths: Alma-150', Eagle-310', No. 2 Gas-350',
Lower War Eagle-690' (All Solid Coal)
- 10) Does land contain coal seams tributary to active mine? Yes / No X /
- 11) Proposed Well Work: Drill & Stimulate New Well
- 12)

CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS		FOOTAGE INTERVALS		CEMENT	
	Size	Grade	Weight per ft.	For drilling		Left in well
Conductor	16	H40	65.0	30	30	CTS 300SR18-11.3 300SR18-11.2
Fresh Water						
Coal	11 3/4	H40	42.0	105	105	CTS
Intermediate	8 5/8	J55	24.0	2107	2107	CTS
Production	5 1/2	J55	15.5	6012	6012	CTS As Needed
Tubing	1.9	CW55	2.76	-	5962	Siphon
Liners						

885-3

PACKERS : Kind
Sizes
Depths set

RECEIVED
MAY 04 1989

For Division of Oil and Gas Use Only

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

506571

Fee(s) paid: Well Work Permit Reclamation Fund WPCP
 Plat WW-9 WW-2B Bond SR Blomquist Agent
(Type)

RECEIVED
MAY 04 1989

Date: May 2, 1989
Operator's well number
Elk Creek Coal Land Co. #25, Serial #118021
API Well No: 47 - 045 - 1139
State - County - Permit

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY
STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS

NOTICE AND APPLICATION FOR A WELL WORK PERMIT

4) Surface Owner(s) to be served:
(a) Name Georgia-Pacific Corp.
Address 133 Peachtree
Atlanta, GA 30303
(b) Name _____
Address _____
(c) Name _____
Address _____
6) Inspector Tim Bennett
Address 525 Tiller St.
Logan, WV 25601
Telephone (304) - 792-7075

5) (a) Coal Operator:
Name Island Creek Corp.
Address P.O. Box 840
Holden, WV 25625
(b) Coal Owner(s) with Declaration
Name Island Creek Corp.
Address P.O. Box 840
Holden, WV 25625
Name _____
Address _____
(c) Coal Lessee with Declaration
Name None
Address _____

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

X Included is the information required by Chapter 22B, Article 1, Section 8(d) of the Code of West Virginia (see page 2)

I certify that as required under Chapter 22B of the West Virginia Code I have served copies of this notice and application, a location plat, and accompanying documents pages 1 through 2 on the above named parties, by:

- _____ Personal Service (Affidavit attached)
- X Certified Mail (Postmarked postal receipt attached)
- _____ Publication (Notice of Publication attached)

I have read and understand Chapter 22B 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 Ashland Exploration, Inc.
By: J. T. Mellinger
Its: Manager Eastern Region
Address P.O. Box 391
Ashland, KY 41114
Telephone (606) 329-5450

Subscribed and sworn before me this 2nd day of May, 1989

Vicki W. South Notary Public
My commission expires November 23, 1990