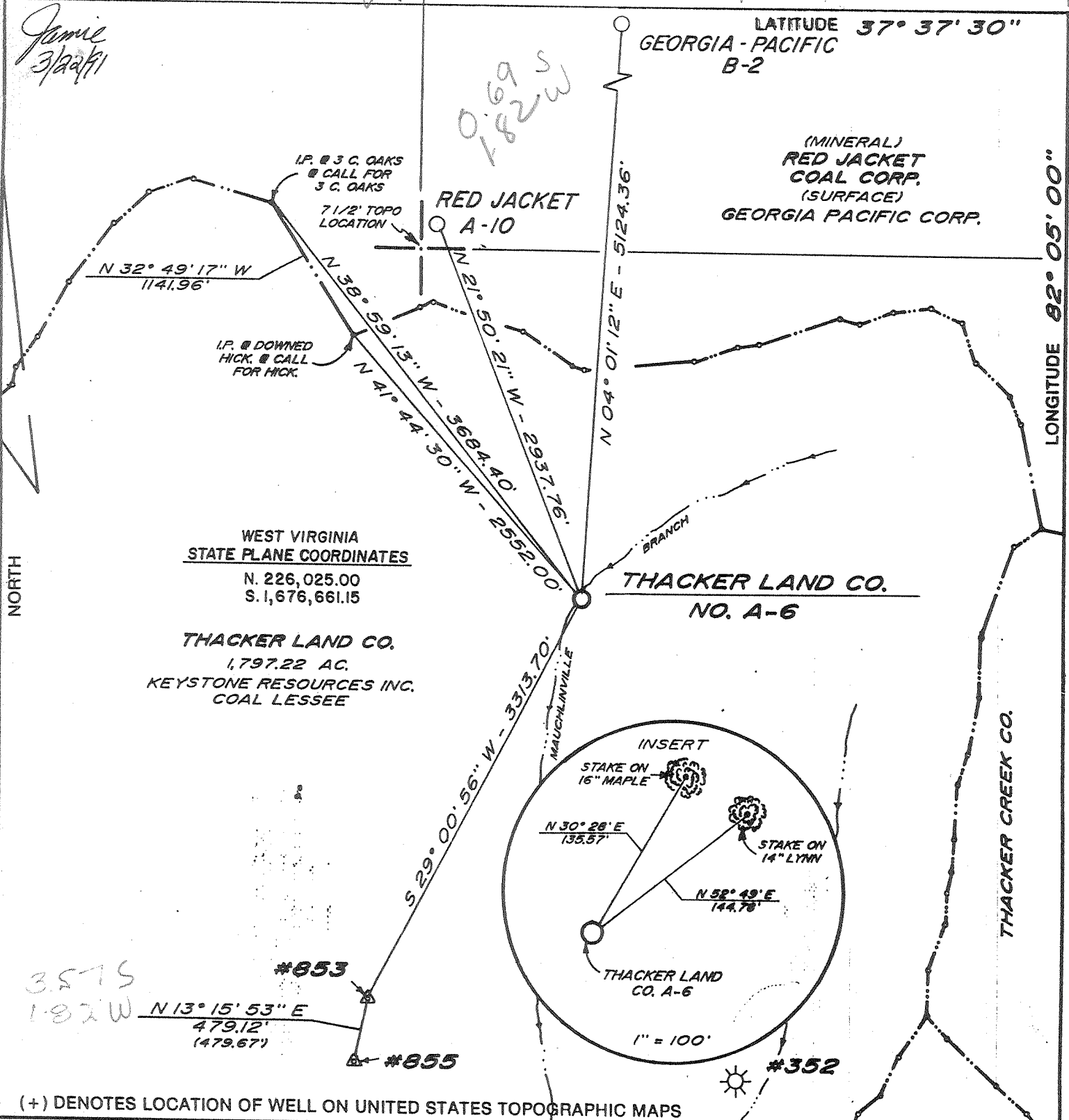


Jamie
3/22/91

LATITUDE 37° 37' 30"
GEORGIA-PACIFIC B-2

(MINERAL)
RED JACKET
COAL CORP.
(SURFACE)
GEORGIA PACIFIC CORP.

LONGITUDE 82° 05' 00"



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

FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 1000'
 MINIMUM DEGREE OF ACCURACY 1: 2500'
 PROVEN SOURCE OF ELEVATION U.S.G.S. BM T-145
 ELEV. 782.47'

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 REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENERGY

(SIGNED) Kenneth D. Pios
 R.P.E. _____ L.L.S. 837-SU

PLACE SEAL HERE

STATE OF WEST VIRGINIA
 DEPARTMENT OF ENERGY
 OIL AND GAS DIVISION



DATE JANUARY 2, 19 91
 OPERATOR'S WELL NO. THACKER LAND CO.
 API WELL NO. NO. A-6
 S.N. 133961

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS,") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X
 STATE 47 COUNTY 059 PERMIT 1147

LOCATION: ELEVATION 1159.31' WATER SHED MAUCHLINVILLE BRANCH
 DISTRICT MAGNOLIA 5 COUNTY MINGO
 QUADRANGLE MAJESTIC Matamoras C

SURFACE OWNER THACKER LAND CO. ACREAGE 1947.04 AC.
 OIL & GAS ROYALTY OWNER THACKER LAND CO. LEASE ACREAGE 1947.04 AC.
 LEASE NO. 80566-00

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 5034 KB
 WELL OPERATOR ASHLAND EXPLORATION INC. DESIGNATED AGENT FORREST BURKETT
 ADDRESS P.O. BOX 391 ASHLAND, KY. 41114 4130 ADDRESS P.O. BOX 379 BRENTON, WV. 24818

COUNTY NAME PERMIT

DEEP WELL 6-6 Magnolia (265)

RECEIVED
Division of Energy

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

AUG 12 91 Well Operator's Report of Well Work

Farm name: THACKER LAND CO

Operator Well No.: A 6 S 133961

LOCATION: Elevation: 1159.31 Quadrangle: MAJESTIC

District: MAGNOLIA County: MINGO
Latitude: 3550 Feet South of 37 Deg. 37Min. 30 Sec.
Longitude 9500 Feet West of 82 Deg. 5 Min. 0 Sec.

Company: ASHLAND EXPLORATION, INC.
P.O. BOX 391, A1-6
ASHLAND, KY 41114-0391

Agent: FORREST BURKETT

Inspector: TIM BENNETT
Permit Issued: 04/01/91
Well work Commenced: 6/1/91
Well work Completed: 7/20/91
Verbal Plugging _____
Permission granted on: _____
Rotary x Cable _____ Rig _____
Total Depth (feet) 4999
Fresh water depths (ft) 5" stream @ 108'
approx. 409
Salt water depths (ft) 946' damp
approx. 1640'
Is coal being mined in area (Y/N)? N
Coal Depths (ft): not noted while drl'g

Casing & Tubing	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
Size 20"	34'	34'	Driven
16"	66'	66'	59
11 3/4"	318'	318'	183
8 5/8"	2351'	2351'	702
5 1/2"	4990'	4990'	729
1.9" @ 4879' w/Pkr @ 2619' KB			
1.9" @ 2569' KB			

OPEN FLOW DATA

Producing formation Devonian Shale Pay zone depth (ft) 3443-4926
Gas: Initial open flow 18/206 MCF/d Oil: Initial open flow _____ Bbl/c
Final open flow 230/1671 MCF/d Final open flow _____ Bbl/c
Time of open flow between initial and final tests 3 Hours
Static rock Pressure 740 psig (surface pressure) after 72 Hours

Second producing formation Big Lime Pay zone depth (ft) 2552-2605
Gas: Initial open flow 188 MCF/d Oil: Initial open flow _____ Bbl/c
Final open flow 159 MCF/d Final open flow _____ Bbl/c
Time of open flow between initial and final tests 3 Hours
Static rock Pressure 45 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, Engr. Tech.
Date: August 7, 1991

AUG 16 1991

<u>ROCK TYPE OR FORMATION</u>	<u>TOP</u>	<u>BASE</u>
Breathitt Formation	0	763
Lee Formation	763	1617
Pennington Formation	1617	2340
Maxton Sand 2107-2212		
Little Lime	2340	2392
Big Lime	2392	2627
Borden Formation	2627	3242
Sunbury Shale	3242	3274
Berea	3274	3315
Devonian Shale	3315	5012
Onondaga LS	5012	TD

LTD 5026'
 DTD 4999'

WELL TREATMENT

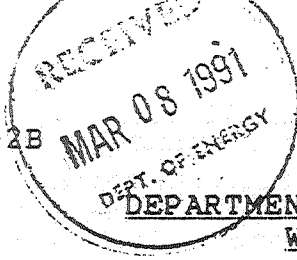
Perf Rhinestreet 19H/4690-4926 - N₂ frac using 500 gal 8% inh Fe acid, 907,000 SCF N₂ @ 98,000 SCF/min. BD @ 2890#, ATP 3400#, MTP 3410#, ISIP 2400# & 5 min 1250#.

Perf Huron 19H/4212-4469. N₂ frac using 500 gal 8% Fe inh acid, 808,000 SCF N₂ @ 98,000 SCF/min. BD @ 2570#, ATP 3500#, MTP 4000#, ISIP 3000#, 5 min 1440#.

Perf Chagrin 20H/3443-3737. N₂ frac using 500 gal 8% Fe inh acid, 907,000 SCF N₂ @ 98,000 SCF/min. BD @ 2550#, ATP 3440#, MTP 3410#, ISIP 2400# & 15 min 1250#.

Perf Big Lime 12H/2552-2605. Pump 1000 gal 16% Fe acid. Breakdown and ball out w/63 bbls. treated wtr & 13 perf balls. BD @ 1180#, MTP 3000#, ATP 2550#, ISIP 200#. Flow back and 75 Q foam frac using ramp schedule from 4#-16#/gal using 500,000 SCF N₂ @ 17,000 SCF/min, 30,000# 20/40 sand. ATP @ 3696# @ 30 bpm foam rate, MTP 4200#, ISIP 2618#, 15 min 2875# & TF 26 bbls.

11980



059-1147
Issued 04/01/91
Page 1 of 1
Expires 04/01/93

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

- 1) Well Operator: Ashland Exploration, Inc. 2750 (S) 452
- 2) Operator's Well Number: Thacker Land Co. #A-6, S.N. 1339613 Elevation: 1159.31
- 4) Well type: (a) Oil / or Gas /
(b) If Gas: Production / Underground Storage /
Deep / Shallow /
- 5) Proposed Target Formation(s): Devonian Shale 441
- 6) Proposed Total Depth: 5034'KB feet
- 7) Approximate fresh water strata depths: 409'KB (Map WV-12)
- 8) Approximate salt water depths: 759'KB (Map WV-12)
- 9) Approximate coal seam depths: Not Operated - Solid Coal
- 10) Does land contain coal seams tributary to active mine? Yes / No /
- 11) Proposed Well Work: Drill & Stimulate New Well
- 12)

CASING AND TUBING PROGRAM

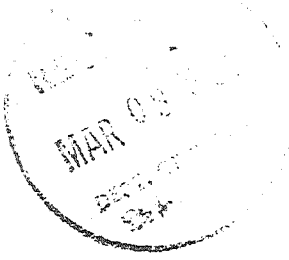
TYPE	SPECIFICATIONS		FOOTAGE INTERVALS			CEMENT
	Size	Grade	Weight per ft.	For drilling	Left in well	Fill-up (cu. ft.)
Conductor	16	LS	42.0	30	30	CTS
Fresh Water						38CSPI 8 11.3
Coal						38CSPI 8 11.2, 2
Intermediate	8 5/8	J55	24.0	2384	2384	CTS
Production	5 1/2	J55	15.5	5034	5034	38CSPI 8 11.1 As Needed
Tubing	1.9	J55	2.76	-	4984	Siphon
Liners						

PACKERS : Kind _____
Sizes _____
Depths set _____

For Division of Oil and Gas Use Only

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

506142
#8



- 1) Date: March 8, 1991
- 2) Operator's well number
Thacker Land Co. #A-6, Serial #133961
- 3) API Well No: 47 - 059 - 1147
State - County - Permit

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

- | | |
|--|---|
| <p>4) Surface Owner(s) to be served:</p> <p>(a) Name <u>Thacker Land Company</u>
Address <u>c/o Georgia-Pacific Corp.</u>
<u>Wvoming, WV 24898</u></p> <p>(b) Name _____
Address _____</p> <p>(c) Name _____
Address _____</p> | <p>5) (a) Coal Operator:
Name <u>Keystone Resources, Inc.</u>
Address <u>P.O. Box 49</u>
<u>Thacker, WV 25694</u></p> <p>(b) Coal Owner(s) with Declaration
Name <u>Thacker Land Company</u>
Address <u>Same as No. 4(a)</u></p> <p>Name _____
Address _____</p> <p>(c) Coal Lessee with Declaration
Name <u>Keystone Resources, Inc.</u>
Address <u>Same as No. 5(a)</u></p> |
| <p>6) Inspector <u>Tim Bennett</u>
Address <u>Route 2 Box 61-B</u>
<u>Chapmanville, WV 25508</u>
Telephone <u>(304)-855-7705</u></p> | |

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 *J. T. Mellinger* **DKC**
Its: Vice President
Address P.O. Box 391
Ashland, KY 41114
Telephone 606-329-5450

Subscribed and sworn before me this 8th day of March, 1991

Ticki W. Smith Notary Public
My commission expires November 23, 1994