

Janie 1/4/91

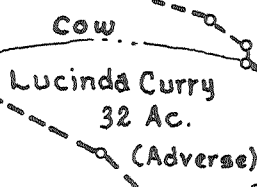
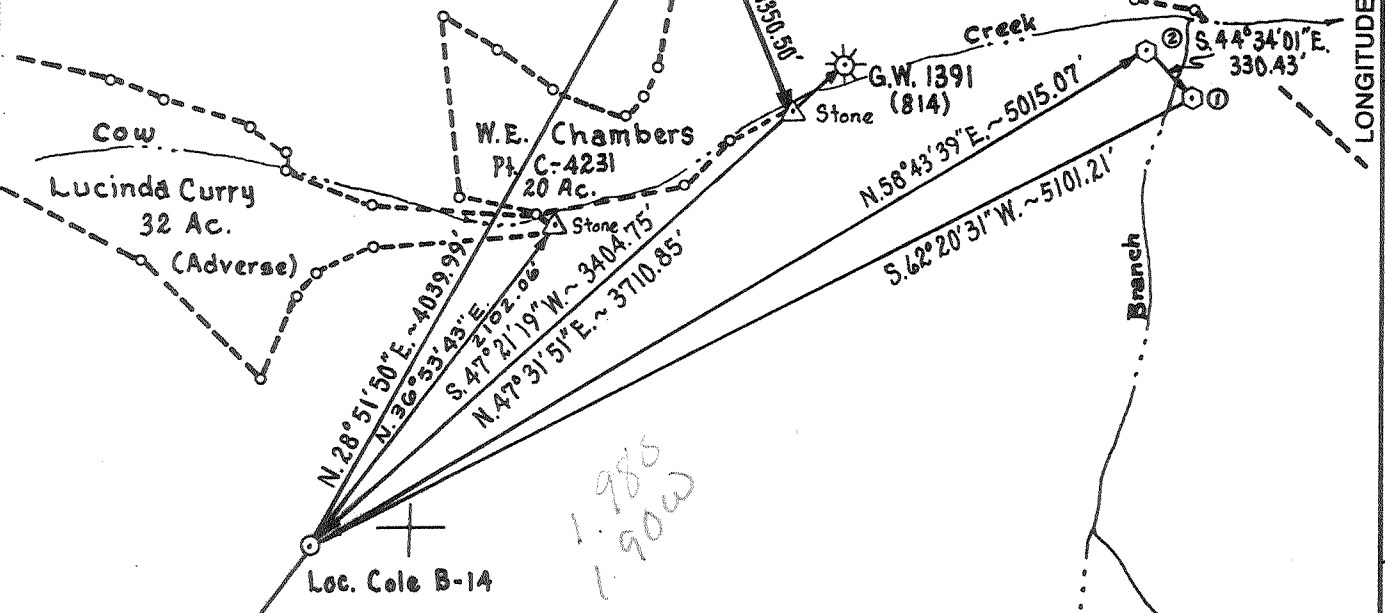
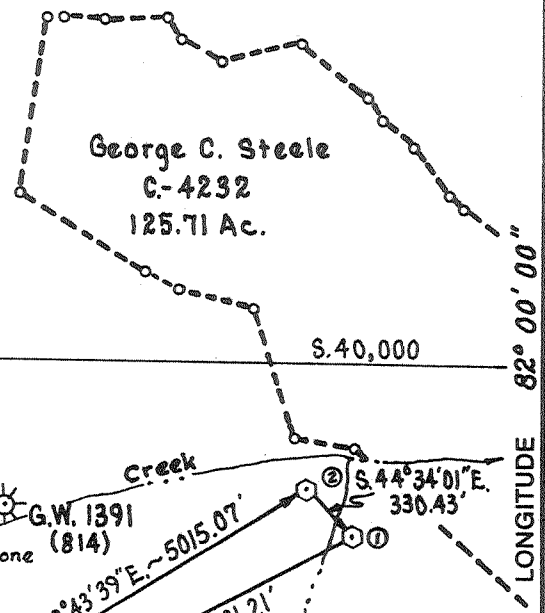
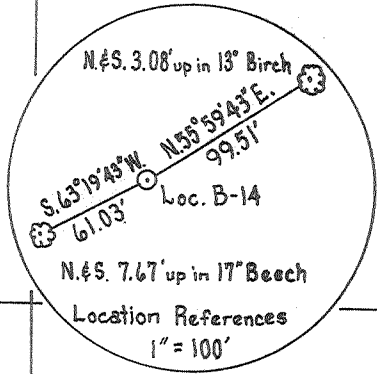
10,010'

LATITUDE 37° 45' 00"

LONGITUDE 82° 00' 00"

10,275'

NORTH



Cole and Crane Real Estate Trust
(formerly Albert H. Cole, et al)
Pt. C-4160
11,124.79 Ac.

- Corners:
- ① Roofbolt, W-P Coal Co. Sta. 38-08
 - ② Roofbolt, W-P Coal Co. Sta. 37-10

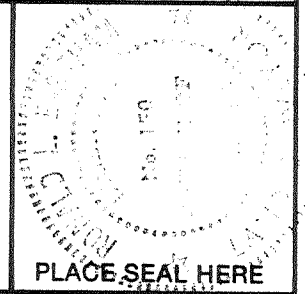
Omar Mining Co. Coordinates for Loc. B-14
S. 43,271.60 W. 8,387.43

G.W. - 1294 (739)

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

FILE NO. _____
DRAWING NO. _____
SCALE 1" = 1000'
MINIMUM DEGREE OF ACCURACY 1: 39,253
PROVEN SOURCE OF ELEVATION U.S.G.S. B.M. "142RHP" elev. 956.904

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) Ronald L. Castle
R.P.E. _____ L.L.S. 150



STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY
OIL AND GAS DIVISION



DATE Nov. 30 19 90
OPERATOR'S WELL NO. Albert H. Cole Trust, et al
API WELL NO. B-14 S.N. 133461
47 - 045 - 1151
STATE COUNTY PERMIT

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
(IF "GAS,") PRODUCTION ___ STORAGE ___ DEEP ___ SHALLOW X
LOCATION: ELEVATION 1152.77 WATERSHED Cow Creek
DISTRICT Island Creek - Logan? COUNTY Logan
QUADRANGLE Barnabus Mason NE
SURFACE OWNER Cole and Crane Real Estate Trust ACREAGE 13,292.15
OIL & GAS ROYALTY OWNER Cole and Crane Real Estate Trust LEASE ACREAGE 11,124.79
LEASE NO. C-4160
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 5,073' KB
WELL OPERATOR Ashland Exploration, Inc. DESIGNATED AGENT Forrest Burkett
ADDRESS P.O. Box 391 ADDRESS P.O. Box 379
Ashland, Ky. 41114 Brenton, W.V. 24818

Deep well 6-6 Magnolia (265)

COUNTY NAME
PERMIT

JAN 11 1991

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

Well Operator's Report of Well Work

Farm name: COLE & CRANE REAL ESTATE Operator Well No.: B-14-S-133461

LOCATION: Elevation: 1152.77 Quadrangle: BARNABUS

District: ISLAND CREEK County: LOGAN
Latitude: 10275 Feet South of 37 Deg. 45Min. 0 Sec.
Longitude 10010 Feet West of 82 Deg. 0 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: 01/08/91
Well work Commenced: 3/25/91
Well work Completed: 4/23/91
Verbal Plugging
Permission granted on: _____
Rotary X Cable _____ Rig
Total Depth (feet) 5058'
Fresh water depths (ft) 199'
Salt water depths (ft) 1450'

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
16"	38'	38'	11.8
11 3/4"	312'	312'	195
8 5/8"	2398'	2398'	709
5 1/2"	4049'	4049'	867
Is coal being mined in area (Y/N)? <u>N</u>			
Coal Depths (ft): <u>not noted while dril'g</u>			

OPEN FLOW DATA

Producing formation Devonian Shale Pay zone depth (ft) 3359-4927
Gas: Initial open flow 35 MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow 552 MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests 3 Hours
Static rock Pressure 850 psig (surface pressure) after 72 Hours

Second producing formation Big Lime Pay zone depth (ft) 2594-2661
Gas: Initial open flow 59 MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow 86 MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests 3 Hours
Static rock Pressure 160# 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: May 8, 1991

MAY 17 1991

<u>FORMATION OR ROCK TYPE</u>	<u>TOP</u>	<u>BASE</u>
Sand & Shale (Base Lee Formation)	0	1754
Pennington Formation	1754	2282
Maxton Sand 2102-2184		
Little Lime	2282	2391
Big Lime	2391	2667
Borden Formation	2667	3177
Sunbury Shale	3177	3209
Berea	3209	3225
Devonian Shale	3225	5045
Onondaga LS	5045	TD

DTD 5058
LTD 5057

WELL TREATMENT

Perf L. Dev. Shale 15H/4769-4927. N2 frac using 500 gal 7 1/2% inh Fe acid, 800,000 SCF N2 @ 73,000 SCF/min. BD @ 2800#, ATP 4450#, MTP 4640#, ISIP 3230#, 15 min 2040#.

Perf M. Dev. Shale 21H/4227-4587. N2 frac using 500 gal 7 1/2% inh Fe acid, 800,000 SCF N2 @ 92,000 SCF/min. BD @ 2360#, ATP 3070#, MTP 3190#, ISIP 2210# & 15 min. 1620#.

Perf U. Dev. Shale 14H/3359-3772. N2 frac using 500 gal 7 1/2% inh Fe acid, 800,000 SCF N2 @ 98,000 SCF/min. BD @ 2190#, ATP 3400#, MTP 3450#, ISIP 1890# & 15 min. 1270#.

Perf Big Lime 25H/2594-2661. Acidize using 8000 gal 16 1/2% Inh Fe acid w/21 perf balls. BD @ 910#, ATP 380# @ 8 BPM, MTP 910# & ISIP 0#.

UD 3225
LH 4225
J 4550
A 4675
RH 4875
MGR 5025

11722

RECEIVED
FORM WW-2B
DEC 20 1990
DEPT. OF ENERGY

045-1151
Issued 11/8/91
Expires 11/8/93
Page 1 of 1

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

- 1) Well Operator: Ashland Exploration, Inc. ⁰⁰⁴³ 2750
Albert H. Cole, Trustee et al
- 2) Operator's Well Number: B-14, Serial #133461 3) Elevation: 1152.77
- 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: 5073'KB feet
- 7) Approximate fresh water strata depths: 387'KB (Map WV-12) 30'
- 8) Approximate salt water depths: 573'KB (Map WV-12) 14.77', 16.41'
- 9) Approximate coal seam depths: Not Operated - Solid Coal 277-279'
- 10) Does land contain coal seams tributary to active mine? Yes / No X/
- 11) Proposed Well Work: Drill & Stimulate Horizontal
- 12)

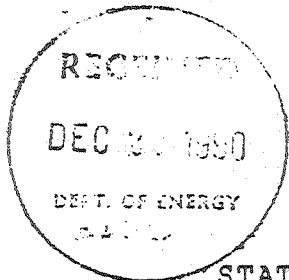
CASING AND TUBING PROGRAM

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						30 CTS SR14-11
Coal						30 CTS SR14-11
Intermediate	8 5/8	J55	24.0	2373	2373	CTS w/Lead C" (2%Gel, 3%CaCl) Tail Cl"A" (3%Ca)
Production	5 1/2	J55	15.5	5073	5073	30 CTS SR14-11 As Needed
Tubing	1.9	J55	2.76	-	5023	Siphon
Liners						

PACKERS : Kind _____
Sizes _____
Depths set _____

For Division of Oil and Gas Use Only

06047
Fee(s) paid: Well Work Permit Reclamation Fund WPCP
Plat WW-9 WW-2B Bond Agent
(Type)



1) Date: December 18, 1990
2) Operator's well number Serial
Albert H. Cole, Trustee etal #B-14, #133461
3) API Well No: 47 - 045 - 1151
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>Cole & Crane Real Estate Trust</u>
Address <u>P.O. Box 610</u>
<u>Omar, WV 25638</u></p> <p>(b) Name _____
Address _____</p> <p>(c) Name _____
Address _____</p> | <p>5) (a) Coal Operator:
Name <u>W-P Coal Company</u>
Address <u>P.O. Box 570</u>
<u>Omar, WV 25638</u></p> <p>(b) Coal Owner(s) with Declaration
Name <u>Same as No. 4(a)</u>
Address _____</p> <p>Name _____
Address _____</p> <p>(c) Coal Lessee with Declaration
Name <u>Same as No. 5(a)</u>
Address _____</p> |
| <p>6) Inspector <u>Tim Bennett</u>
Address <u>Route 2 Box 61-B</u>
<u>Chapmanville, WV 25508</u>
Telephone (304)- <u>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
Its: Vice President
Address P. O. Box 391
Ashland, KY 41114
Telephone 606-329-5450

Subscribed and sworn before me this 18th day of December, 1990

Neil W. Santa Notary Public
My commission expires November 23, 1994