

885'

1820'

LATITUDE 38° 17' 30"

NOTE: ALL WELLS IDENTIFIED WITHIN 2400' ARE SHOWN

ROAD INTERSECTION CO. RT. 23 & 38

ROAD INTERSECTION CO. RT. 38 & 119/20

LONGITUDE 81° 57' 30"

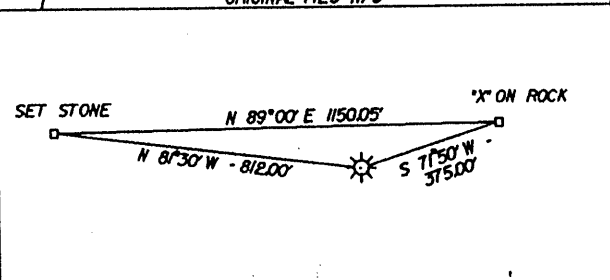
COURTLAND COMPANY 5353 AC.

COURTLAND A-4

COURTLAND COMPANY LOT 79

WELL SITE STATE PLANE WV SOUTH ZONE NAD 1927 N - 469,050J2 E - 1,819,681.78

ORIGINAL TIES N/S



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

FILE NO. EQCRTLANDA4.DGN  
 DRAWING NO. COURTLAND A-4  
 SCALE 1" = 1000'  
 MINIMUM DEGREE OF ACCURACY 1:200  
 PROVEN SOURCE OF ELEVATION OPERATORS WELL RECORD

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 ENVIRONMENTAL PROTECTION.  
 (SIGNED) [Signature]  
 R.P.E. \_\_\_\_\_ L.L.S. 647

PLACE SEAL HERE

STATE OF WEST VIRGINIA  
 DIVISION OF ENVIRONMENTAL PROTECTION  
 OIL AND GAS DIVISION



DATE MAY 29, 2002  
 OPERATOR'S WELL NO. COURTLAND A-4  
 API WELL NO. 47 039 01838 P  
 STATE COUNTY PERMIT

WELL TYPE: OIL    GAS    LIQUID INJECTION    WASTE DISPOSAL X  
 (IF "GAS,") PRODUCTION    STORAGE    DEEP    SHALLOW     
 LOCATION: ELEVATION 781.84' WATER SHED RIGHT FORK OF CANE FORK  
 DISTRICT LOUDEN COUNTY KANAWHA  
 QUADRANGLE CHARLESTON WEST, WV 7.5'

SURFACE OWNER COURTLAND COMPANY ACREAGE 5353  
 OIL & GAS ROYALTY OWNER COURTLAND COMPANY LEASE ACREAGE LOT 79  
 LEASE NO. \_\_\_\_\_

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

PLUG AND ABANDON X CLEAN OUT AND REPLUG     
 TARGET FORMATION BIG INJUN ESTIMATED DEPTH 1480'  
 WELL OPERATOR EQUITABLE PRODUCTION CO. DESIGNATED AGENT RICHARD SMELTZER  
 ADDRESS P.O. BOX 2347 CHARLESTON, WV 25328 ADDRESS SAME

COUNTY NAME KAN  
 PERMIT 1838 P

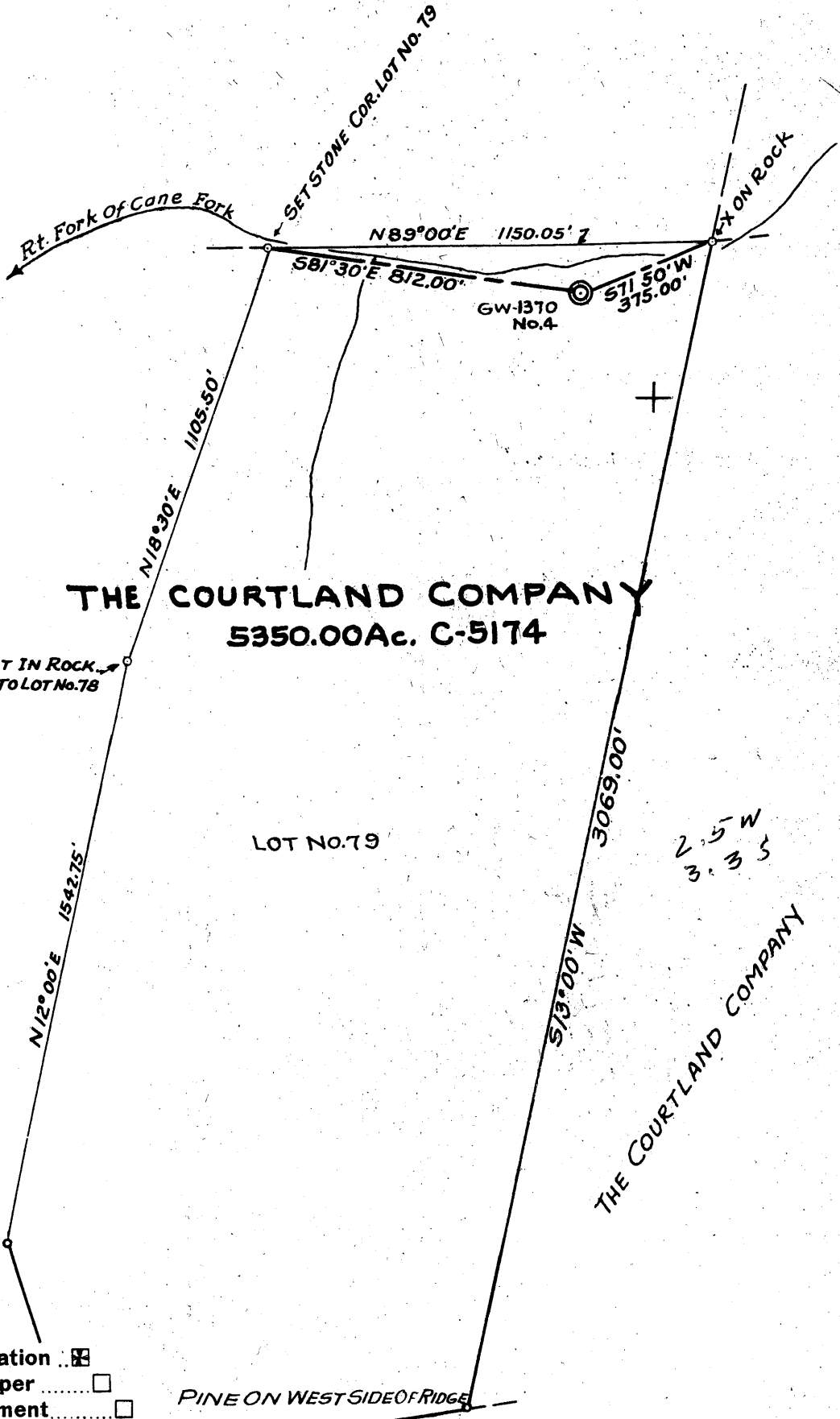
9-AM FORM

JUN 21 2002

Latitude 38° 20'

Longitude 81° 35'

THE COURTLAND COMPANY



SPLIT IN ROCK  
COR. TO LOT No. 78

THE COURTLAND COMPANY  
5350.00Ac. C-5174

LOT NO. 79

THE COURTLAND COMPANY

PINE ON WEST SIDE OF RIDGE

- New Location
- Drill Deeper
- Abandonment

Company COLUMBIAN CARBON COMPANY

Address BOX 873 CHARLESTON W.VA.

Farm THE COURTLAND COMPANY

Tract 79 Acres 5350.00 Lease No. C-5174

Well (Farm) No. 4 Serial No. GW-1370

Elevation (Spirit Level) 791.84'

Quadrangle CHARLESTON S-32B W-254

County KANAWHA District LOUDON

Engineer Wendell S. Moore

Engineer's Registration No. 2113

File No. \_\_\_\_\_ Drawing No. W-10-62

Date FEB. 26-1962 Scale 1" = 400'

STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
OIL AND GAS DIVISION  
CHARLESTON

WELL LOCATION MAP

FILE NO. KAN-1838

+ Denotes location of well on United States Topographic Maps, scale 1 to 62,500, latitude and longitude lines being represented by border lines as shown.

- Denotes one inch spaces on border line of original tracing.



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
OIL AND GAS DIVISION 14

Quadrangle Chas. SW

WELL RECORD

Permit No. Kan-1838

Oil or Gas Well gas

Company Columbian Carbon Company  
Address P. O. Box 873, Charleston 23, W. Va.  
Farm The Courtland Company Acres 5, 350  
Location (waters) Right Fork Cane Creek  
Well No. 4 - GW-1370 Elev. 781.84'  
District Loudon County Kanawha  
The surface of tract is owned in fee by The Courtland Co  
205 Odd Fellows Bldg Address Chas. 1, W. Va.  
Mineral rights are owned by same

Address \_\_\_\_\_  
Drilling commenced 5-19-62  
Drilling completed 7-7-62  
Date Shot not shot From \_\_\_\_\_ To \_\_\_\_\_

With \_\_\_\_\_  
Open Flow \_\_\_\_\_ /10ths Water in \_\_\_\_\_ Inch  
\_\_\_\_\_ /10ths Merc. in \_\_\_\_\_ Inch  
Volume \_\_\_\_\_ show \_\_\_\_\_ Cu. Ft.  
Rock Pressure \_\_\_\_\_ lbs. \_\_\_\_\_ hrs.  
Oil \_\_\_\_\_ bbls., 1st 24 hrs.  
WELL ACIDIZED not acidized

WELL FRACTURED see reverse side

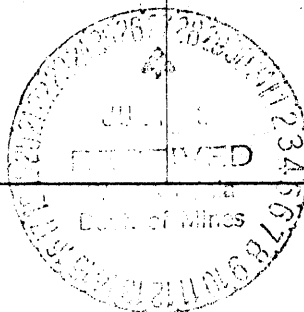
Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			
16			Kind of Packer
13			<u>Larkin Hookwall</u>
10 <u>3/4" 32#</u>	<u>17'2"</u>	<u>17'2"</u>	Size of <u>5x2"</u>
<u>8 1/4" 24#</u>	<u>387'</u>	<u>pulled</u>	
<del>8 1/4" 23#</del>	<u>677'2"</u>	<u>677'2"</u>	Depth set <u>1388'3"</u>
<u>5 3/16" 14#</u>	<u>1252'9"</u>	<u>1252'9"</u>	
<u>3</u>			Perf. top _____
<u>2 3/8" 4#</u>	<u>1480'7"</u>	<u>1480'7"</u>	Perf. bottom _____
Liners Used <u>w/ 2" cage</u>	<u>on bottom</u>		Perf. top _____
			Perf. bottom _____

CASING CEMENTED \_\_\_\_\_ SIZE \_\_\_\_\_ No. Ft. \_\_\_\_\_ Date \_\_\_\_\_  
see reverse side  
COAL WAS ENCOUNTERED AT none FEET \_\_\_\_\_ INCHES  
\_\_\_\_\_ FEET \_\_\_\_\_ INCHES FEET \_\_\_\_\_ INCHES  
\_\_\_\_\_ FEET \_\_\_\_\_ INCHES FEET \_\_\_\_\_ INCHES

RESULT AFTER TREATMENT 55/10 W. 2" = 313MCF (Big Lime and Big Injun)  
ROCK PRESSURE AFTER TREATMENT 69 hours 312# Big Injun -- 5 days 117# Big Lime  
Fresh Water 90-100' Feet \_\_\_\_\_ Salt Water 690-700' 720' Feet \_\_\_\_\_

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
Gravel and Sand			0	40			
Sand			40	80			
Slate			80	325	F. water	90-100'	hole full
Sand			325	430			
Slate			430	463			
Sand			463	505	Gas	680-90'	show
Slate			505	560	Oil	680-90'	show
Sand <u>salt</u>			560	810	S. water	690-700'	
Slate			810	833	S. water	720'	hole full
Lime			833	875	Oil	765'	show
Sand and Lime			875	886			
Sand			886	1058	Gas	978-83'	show
Lime			1058	1080			
Sand			1080	1130			
Lime			1130	1151			
Sand			1151	1168			
Slate			1168	1188			
Big Lime			1188	1428	Gas 1328-29'	2/10 W. 1" = 15M	
Big Injun Sand			1428	1459	Gas 1342-46'	8/10 M. 5-1/2" = 271 6M-	
Slate			1459	1465			drowned out
Gritty Lime			1465	1479			
Total depth				1479'			
Cemented to				1455'			

(over)



Formation	Color	Hard or Soft	Top / 4	Bottom	Oil, Gas or Water	Depth Found	Remarks
<u>CASING RECORD</u>							
5-21-62							Ran 10-3/4" drive pipe at 17'DLM
5-26-62							Ran 8-5/8" with shoe and Midget bottom hole packer at 386'DLM-pulled.
5-29-62							Ran 7" with shoe set in 30' coal and red mud at 671'DLM-Anchor packer set at 546'.
6-26-62							Ran 5-1/2" casing with shoe at 1242' DLM - set in 23' red mud.
<u>FRACTURING RECORD</u>							
Fractured the Big Injun 7-10-62. Before fracturing show of gas. Ran 1,500 gallons 15% regular acid - maximum pressure 2,500#. Fractured with 15,000 gallons water, 16,500# 20-40 sand, 250# WAC-8 - 1/2 drum T-08 and 1/2 drum TMN Tergitol. Maximum pressure 3,200# - average treating pressure 2,500#. Injection rate 16 bbls/min-1500# at end.							
Final open flow 55/10 W. 2" = 313 MCF - all gas (Big Lime and Big Injun)							

Date..... July 26 ....., 1962

APPROVED Columbian Carbon Company, Owner

By W. S. Moore, Mgr. of Prod.  
(Title)

STATE OF WEST VIRGINIA  
DIVISION OF ENVIRONMENTAL PROTECTION  
OFFICE OF OIL AND GAS

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE IN TRIPLICATE, one copy mailed to the Division, one copy to be retained by the Well Operator and the third copy (and extra copies if required) should be mailed to each coal operator at their respective addresses.

Farm name: Courtland Company

Operator Well No: Courtland Co. # A4

LOCATION: Elevation: 781.84ft. Quadrangle: Charleston West 7.5  
District: Loudon County: Kanawha  
Latitude: 1820' Feet South of 38 Deg. 17 Min. 30 Sec.  
Longitude: 885' Feet West of 81 Deg. 37 Min. 30 Sec.

Well Type: OIL \_\_\_\_\_ GAS XXXX

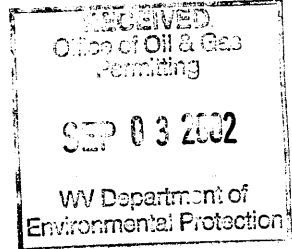
Company: Equitable Production Company  
P. O. Box 2347  
Charleston, WV 25302

Coal Operator Same as Surface Owner  
or Owner

Coal Operator None  
or Owner

Agent: Richard Smeltzer

Permit Issued Date: 6/17/02



AFFIDAVIT

STATE OF WEST VIRGINIA,  
County of Kanawha ss:

Keven Clowser and William Steele being first duly sworn according to law depose and say that they are experienced in the work of plugging and filling oil and gas wells and were employed by the above named well operator, and participated in the work of plugging and filling the above well, and Carlos Hively Oil and Gas Inspector representing the Director, say that said work was commenced on the 24 day of July, ~~18~~ 2002, and that the well was plugged and filled in the following manner:

TYPE	FROM	TO	PIPE REMOVED	LEFT
Gell	1480	1356	1480 2 3/8 tubing	0
Cement 25sk	1356	1146		
Gell	1146	651		
Cement 30sk	651	391		
Gell	391	155		
Cement 21sk	155	SURFACE		
(NOTE)	NO CASING FREE	unable to retrieve		Backed off 4" of 7"

Description of monument: Partial Plugging / Well still in production and that the work of partial plugging and filling said well was completed on the 26 day of July, 2002

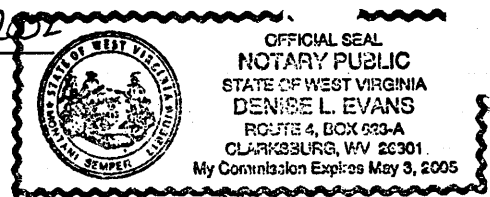
And further deponents saith not.

William Steele  
Notary Public

SEP 06 2002

Sworn and subscribe before me this 23 day of July, 2002  
My commission expires: 5/3/2005

Carlos W. Hively  
Oil and Gas Inspector



KAN 1838