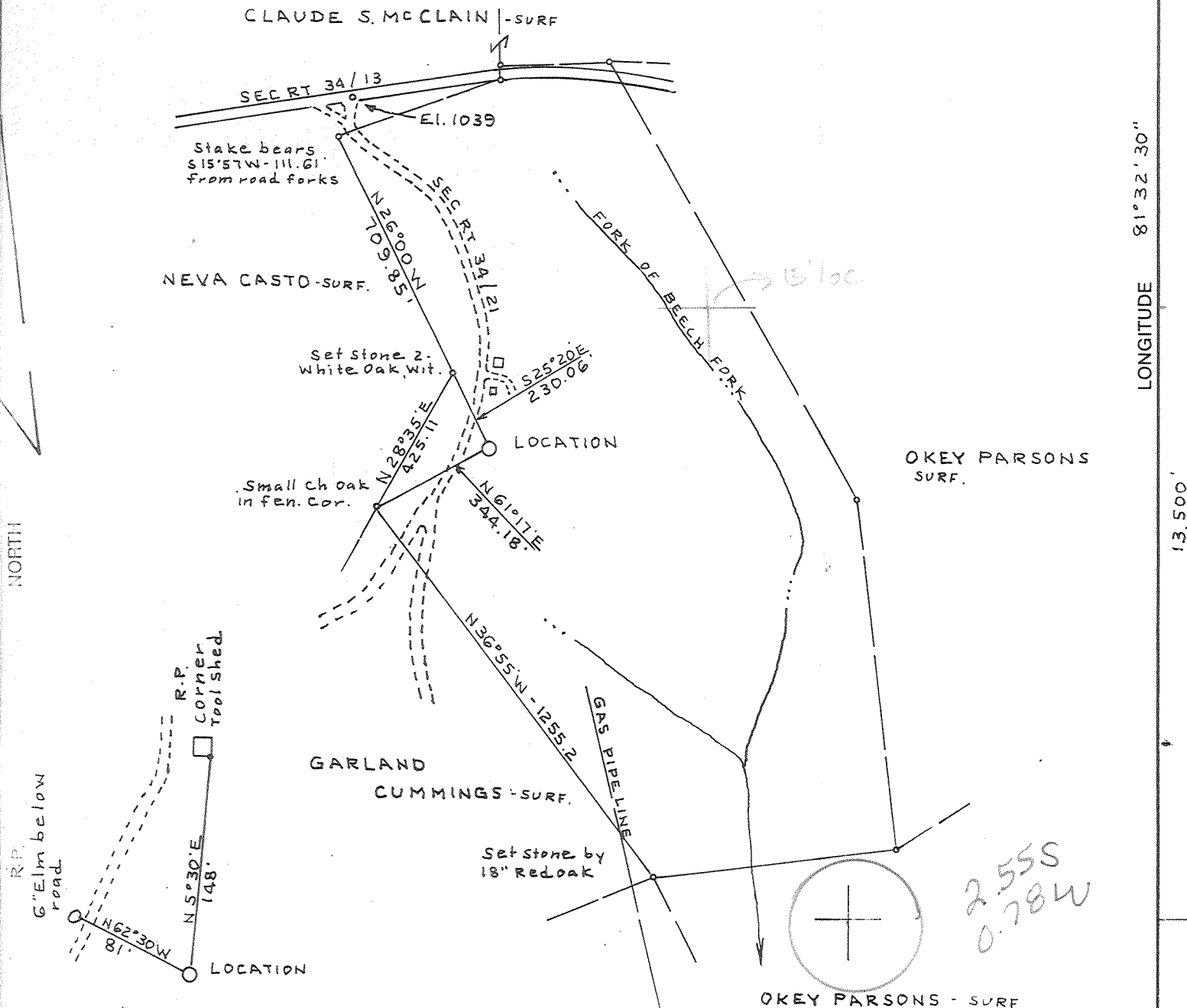


Janie 3/26/90

LATITUDE 38°45'00"




2.55 S
3.03 W
Kenna NE

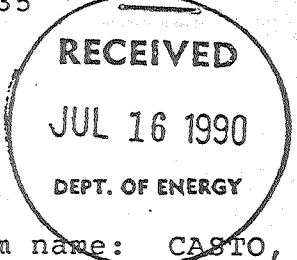
NO COAL OPERATIONS

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

FILE NO. _____ DRAWING NO. _____ SCALE <u>1" = 400'</u> MINIMUM DEGREE OF ACCURACY <u>1:2500'</u> PROVEN SOURCE OF ELEVATION <u>USGS E1 1039 road forks 1025 NW of loc.</u>	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) <u>C. S. Valley Jr.</u> R.P.E. _____ L.L.S. <u>92</u>	PLACE SEAL HERE
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STATE OF WEST VIRGINIA DEPARTMENT OF ENERGY OIL AND GAS DIVISION		DATE <u>MARCH 2</u> , 19 <u>90</u> OPERATOR'S WELL NO. <u>29, S.N. 120681</u> API WELL NO. <u>47 035 2208</u>
WELL TYPE: OIL ___ GAS <u>X</u> LIQUID INJECTION ___ WASTE DISPOSAL ___ (IF "GAS,") PRODUCTION <u>X</u> STORAGE ___ DEEP ___ SHALLOW <u>X</u>	STATE <u>47</u> COUNTY <u>035</u> PERMIT <u>2208</u>	COUNTY NAME PERMIT
LOCATION: ELEVATION <u>1038.22</u> WATERSHED <u>BEECH FORK OF BEAR FORK</u> DISTRICT <u>WASHINGTON 5</u> COUNTY <u>JACKSON</u> QUADRANGLE <u>KENTUCK Kenna NE</u>	SURFACE OWNER <u>NEVA CASTO</u> ACREAGE <u>45</u> OIL & GAS ROYALTY OWNER <u>ELIZABETH WARD PERKINS ETAL</u> LEASE ACREAGE <u>27,600</u> LEASE NO. <u>2428</u>	
PROPOSED WORK: DRILL <u>X</u> CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE <u>X</u> PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION ___ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____		
PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___ TARGET FORMATION <u>DEVONIAN SHALE</u> ESTIMATED DEPTH <u>5413 KB</u>		
WELL OPERATOR <u>ASHLAND EXPLORATION INC.</u> DESIGNATED AGENT <u>FORREST BURKETT</u> ADDRESS <u>BOX 391, ASHLAND KY, 41101</u> ADDRESS <u>P.O. BOX 379, BRENTON WV 24818</u>		

DEEP WELL 6-6 Gay (163)



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

Well Operator's Report of Well Work

Farm name: CASIO, DAVID D. ADM. Operator Well No.: 29-S-120681

LOCATION: Elevation: 1038.22 Quadrangle: KENTUCK

District: WASHINGTON County: JACKSON
Latitude: 13500 Feet South of 38 Deg. 45Min. 0 Sec.
Longitude: 4200 Feet West of 81 Deg. 32 Min. 30 Sec.

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

Agent: FORREST BURKETT

Inspector: JERRY TEPHABOCK
Permit Issued: 04/04/90
Well work Commenced: 5/9/90
Well work Completed: 6/25/90
Verbal Plugging
Permission granted on: _____
Rotary X Cable _____ Rig
Total Depth (feet) 5425'
Fresh water depths (ft) _____
71' 1/4" stream, 143 1/2" stream, 82'
Salt water depths (ft) 1 1/2" stream
@ 1900'
Is coal being mined in area (Y/N)? _____
Coal Depths (ft): Not noted during drl'g

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
16"	47'	47'	7 cuft.
9 5/8"	870'	870'	324 cuft
7"	2315'	2315'	324 cuft
4 1/2"	5361'	5361'	298 cuft
2 3/8" tbg @ 5257' KB			

OPEN FLOW DATA

Producing formation Devonian Shale Pay zone depth (ft) 3890-5280
Gas: Initial open flow 0 MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow 561 MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests 3 Hours
Static rock Pressure 1060 psig (surface pressure) after 72 Hours

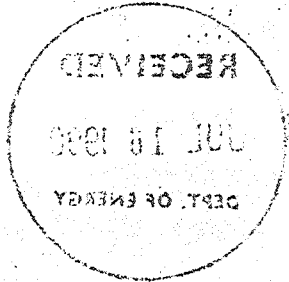
Second producing formation _____ Pay zone depth (ft) _____
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure _____ psig (surface pressure) after _____ 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: 7/13/90

JUL 20 1990



<u>FORMATION</u>	<u>TOP</u>	<u>BASE</u>
Sand & Shale	0	1868
Lower Lee Sand	1868	2067
Shale	2067	2118
Big Lime	2118	2171
Shale	2171	2189
Injun	2189	2253
Shale	2253	2631
Coffee Shale	2631	2655
Berea	2655	2666
Devonian Shale	2666	5403
Onondaga LS	5403	TD

DTD 5425
LTD 5410

WELL TREATMENT

Perf L. Dev. Shale 25H/4937-5280. ^{A Rh} N₂ frac using 500 gal 15% Inh. Fe acid & 1,000,025 SCF N₂ @ 86,000 SCF/min. BD @ 3058#, ATP 4398#, MTP 4068#, ISIP 1844# & 15 min 1728#.

Perf U. Dev. Shale 25H/3890-4548. ^{LH} N₂ frac using 1000 gal 7 1/2% Inh. Fe acid & 1,000,014 SCF N₂ @ 85,000 SCF/min. BD @ 2307#, ATP 3831#, MTP 4160#, ISIP 2106# & 15 min 1529#.

10330

RECEIVED
MAR 16 1997

035 2208
Issued 4/4/90
Expires 4/4/92

FORM WW-2B

Page 1 of 1

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

- 1) Well Operator: Ashland Exploration, Inc. ⁰⁰⁴³ 750 (15) 416
E. W. Perkins, etal
- 2) Operator's Well Number: 29, Serial #120681 3) Elevation: 1038.2
- 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 ⁴⁴¹
- 6) Proposed Total Depth: 5413'KB feet
- 7) Approximate fresh water strata depths: 671', 826'
- 8) Approximate salt water depths: 2023'KB
- 9) Approximate coal seam depths: None
- 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	LS	42.0	30	30	CTS
Fresh Water	9 5/8	1 1/4	32.3	956'	956'	CTS
Coal						38CS18-11.3
Intermediate	8 5/8	J55	24.0	2303	2303	38CS18-11.2
Production	5 1/2	J55	15.5	5413	5413	38CS18-11.1 As Needed
Tubing	1.9	J55	2.76	-	5363	Siphon
Liners						

PACKERS : Kind _____
Sizes _____
Depths set _____

For Division of Oil and Gas Use Only

506845
 Fee(s) paid: Well Work Permit Reclamation Fund WPCP
 Plat WW-9 WW-2B Bond _____ Agent
 (Type)

RECEIVED
MAR 16 1990

Date: March 13, 1990
Operator's well number
E. W. Perkins, etal No. 29, Serial #120681
API Well No: 47 - 035 - 2208
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 ~~XXXXXXXXXX~~
Address _____
 - (b) Name David D. Casto, Adm.
Address Route 2, Box 25A
Kenna, WV 25248
 - (c) Name _____
Address _____
- 5) (a) Coal Operator:
Name N/A
Address _____
- (b) Coal Owner(s) with Declaration
Name No Coal
Address _____
- Name _____
Address _____
- 6) Inspector Jerry Tephabock
Address Route 1, Box 101-A
Ripley, WV 25271
Telephone (304)- 372-6805
- (c) Coal Lessee with Declaration
Name _____
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 13th day of March, 1990

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