

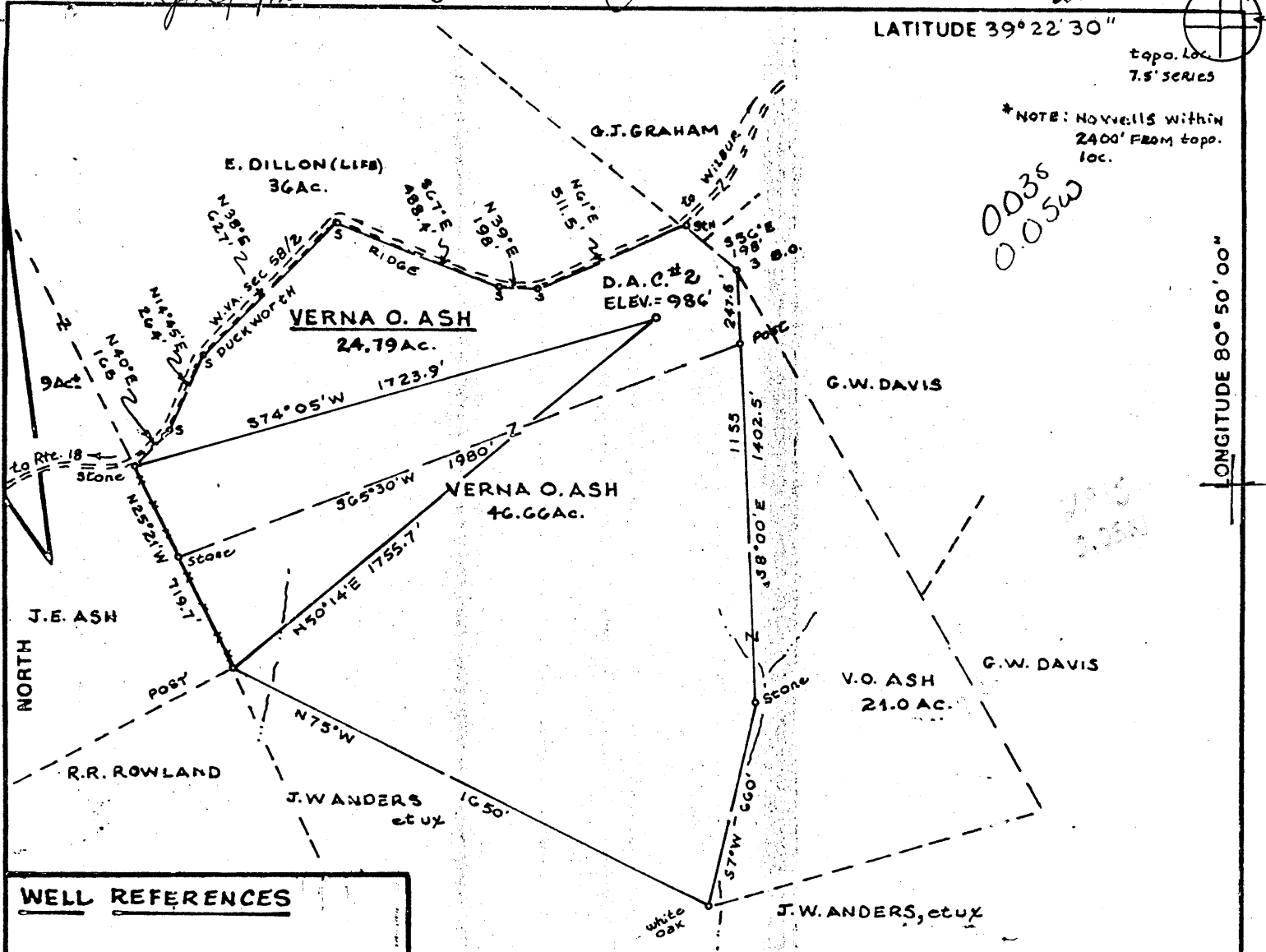
LATITUDE 39° 22' 30"

topo. loc. 7.5' SERIES

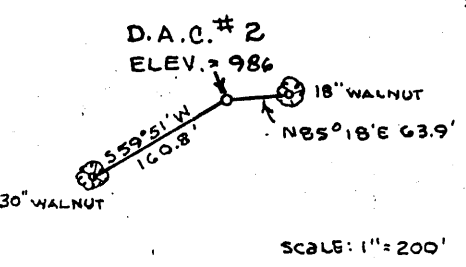
*NOTE: No wells within 2400' from topo. loc.

0036
0.05W

LONGITUDE 80° 50' 00"



WELL REFERENCES



FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 500'
 MINIMUM DEGREE OF ACCURACY 1/200
 PROVEN SOURCE OF ELEVATION TOP OF KNOB 3700' ± SW OF LOC. - ELEV. = 996

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 MINES.

(SIGNED) Mark C. Echard
 MARK C. ECHARD

R.P.E. _____ L.L.S. 490



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

FORM IV-6 (8-78)



DATE JANUARY 25 1988
 OPERATOR'S WELL NO. V.ASH#2
 API WELL NO. _____
47-095-1227
 STATE COUNTY PERMIT

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION

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

LOCATION: ELEVATION 986' WATER SHED CAMP MISTAKE RUN
 DISTRICT CENTERVILLE COUNTY TYLER
 QUADRANGLE WEST UNION 671 133 C5

SURFACE OWNER VERNA O. ASH ACREAGE 24.79 of 92.5
 OIL & GAS ROYALTY OWNER VERNA O. ASH, et al LEASE ACREAGE 24.79 of 92.5
 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 ___ CLEAN OUT AND REPLUG ___

TARGET FORMATION BENSON-RILEY ESTIMATED DEPTH 5300' ±

WELL OPERATOR D.A.C. DESIGNATED AGENT KENNETH MASON

ADDRESS P.O. BOX 99 ADDRESS P.O. BOX 99
ALMA, W.VA. 26320 280 ALMA, W.VA. 26320

MAR 11 1988

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

Well Operator's Report of Well Work

Farm name: ASH, VERNA

Operator Well No.: ASH 2

LOCATION: Elevation: 986.00 Quadrangle: WEST UNION

District: CENTERVILLE County: TYLER
Latitude: 150 Feet South of 39 Deg. 22Min. 30 Sec.
Longitude: 290 Feet West of 80 Deg. 50 Min. 0 Sec.

Company: DRILLING APPALACHIAN CORP.

ROUTE 1, BOX 51A
CAIRO, WV

Agent: KENNETH R. MASON

Inspector: ROBERT LOWTHER

Permit Issued: 03/08/88
Well work Commenced: 3-8-88
Well work Completed: 3-14-88

Verbal Flugging
Permission granted on: n/a
Rotary Cable Ris
Total Depth (feet) 5142
Fresh water depths (ft) 780

Salt water depths (ft)

Is coal being mined in area (Y/N)? N
Coal Depths (ft): 0

Size	Casings & Tubing	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
8-5/8		1185	1170	cts
4-1/2		5142	5033	285 sks

OPEN FLOW DATA

Producing formation Benson Pay zone depth (ft) 4930
Gas: Initial open flow trace MCF/d Oil: Initial open flow 0 Bbl/d
Final open flow 360 MCF/d Final open flow 0 Bbl/d
Time of open flow between initial and final tests 4 Hours
Static rock Pressure 1625 psig (surface pressure) after 96 Hours

Second producing formation Riley Pay zone depth (ft) 4510-4538
Gas: Initial open flow 0 MCF/d Oil: Initial open flow 0 Bbl/d
Final open flow 0 MCF/d Final open flow 0 Bbl/d
Time of open flow between initial and final tests 0 Hours
Static rock Pressure 0 psig (surface pressure) after 0 Hours

Riley commingled with Benson

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.

Kenneth R. Mason

For: DRILLING APPALACHIAN CORP.

APR 22 1988

By: Kenneth R. Mason

Date: April 13, 1988

DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.

Perforate Benson 4926-4930, with 14 holes Frack with 350 sks 20/40
 100 sks 80/100, 71,000 scf N2, Avg rate 27.7 Avg psi 2795

Perforate Riley 4510-4538, With 14 holes Frack with 155 sks 20/40
 50 sks 80/100, 36,000 scf N2, Avg rate 19.6 Avg psi 2405

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
					Including indication of all fres and salt water, coal, oil and ga
fill			0	27.	water 780'
shale			27	1245	oil 2549 ✓
rr			1245	1842	
Lime			1842	1890	E Lbg Tops ✓
sand			1890	2040	
sh			2040	2200	Big Lime 1830
sd			2200	2310	Berea 2400
sh			2310	2400	✓ Benson 4907
sd			2400	2410	
sh/sd			2410	2825	
sd			2825	2835	
sh			2835	TD	
TD				<u>5142</u>	

FORM WV-2 (B) FILE COPY
 (Obtained 7/85)
RECEIVED
 MAR 05 1988



1) Date: Feb. 3, 1988
 2) Operator's Well No. Ash #2
 3) API Well No. 47 -095 - 1227
 State County Permit

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

- 4) WELL TYPE: A Oil / Gas
 B (If "Gas", Production / Underground storage / Deep / Shallow)
- 5) LOCATION: Elevation: 986' Watershed: Camp Mistake Run
 District: Centerville / County: Tyler 095 Quadrangle: West Union 670
- 6) WELL OPERATOR D.A.C. 280 CODE: 14425 7) DESIGNATED AGENT Kenneth R. Mason
 Address PO Box 99 Alma, WV 26320-0099
 Address PO Box 99 Alma, WV 26320-0099
- 8) OIL & GAS INSPECTOR TO BE NOTIFIED 9) DRILLING CONTRACTOR:
 Name Robert Lowther Name Burdette Oil & Gas Co.
 Address Middlebourne, WV 26149 Address 2303 Roxalana Rd. Dunbar, WV 25064
- 10) PROPOSED WELL WORK: Drill / Drill deeper / Redrill / Stimulate
 Plug off old formation / Perforate new formation
 Other physical change in well (specify) Benson/Riley 435
- 11) GEOLOGICAL TARGET FORMATION, 5300 ± feet
 12) Estimated depth of completed well, 150' feet; salt, 1445' feet.
 13) Approximate strata depths: Fresh, None 572-575 feet; Is coal being mined in the area? Yes No
 14) Approximate coal seam depths: from Tyler 97, 289, 427, 478, 876

CASING OR TUBING TYPE	SPECIFICATIONS					FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS
	Size	Grade	Weight per ft.	New	Used	For drilling	Left in well		
Conductor	11 3/4	H-40	42	X		30'	0'		Kinds
Fresh water									Sizes 38CSR18-11.3
Coal									38CSR18-11.2.2
Intermediate	8 5/8	J-55	20	X		1100'-1350'	1100' 1350'	CTS Neat	Depths set 38CSR18-11.1
Production	4 1/2	J-55	10 1/2	X		5000'	5000'	CTS Neat	
Tubing									Perforations:
Lin...									Top Bottom

OFFICE USE ONLY
 DRILLING PERMIT

Permit number 47-095-1227 Date March 8 19 88

This permit covering the well operator and well location shown below is evidence of permission granted to drill in accordance with the pertinent legal requirements subject to the conditions contained herein and on the reverse hereof. Notification must be given to the District Oil and Gas Inspector. (Refer to No. 8) Prior to the construction of roads, locations and pits for any permitted work. In addition, the well operator or his contractor shall notify the proper district oil and gas inspector 24 hours before actual permitted work has commenced.)

The permitted work is as described in the Notice and Application, plat, and reclamation plan, subject to any modifications and conditions specified on the reverse hereof.
 Permit expires March 8, 1990 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond:	Agent:	Plat:	Casing	Fee	WPC	SEP	Other
500				6			
				3010			

NOTE: Keep one copy of this permit posted at the drilling location. Director, Division of Oil and Gas File

See the reverse side of the APPLICANT'S COPY for instructions to the well operator.

6723