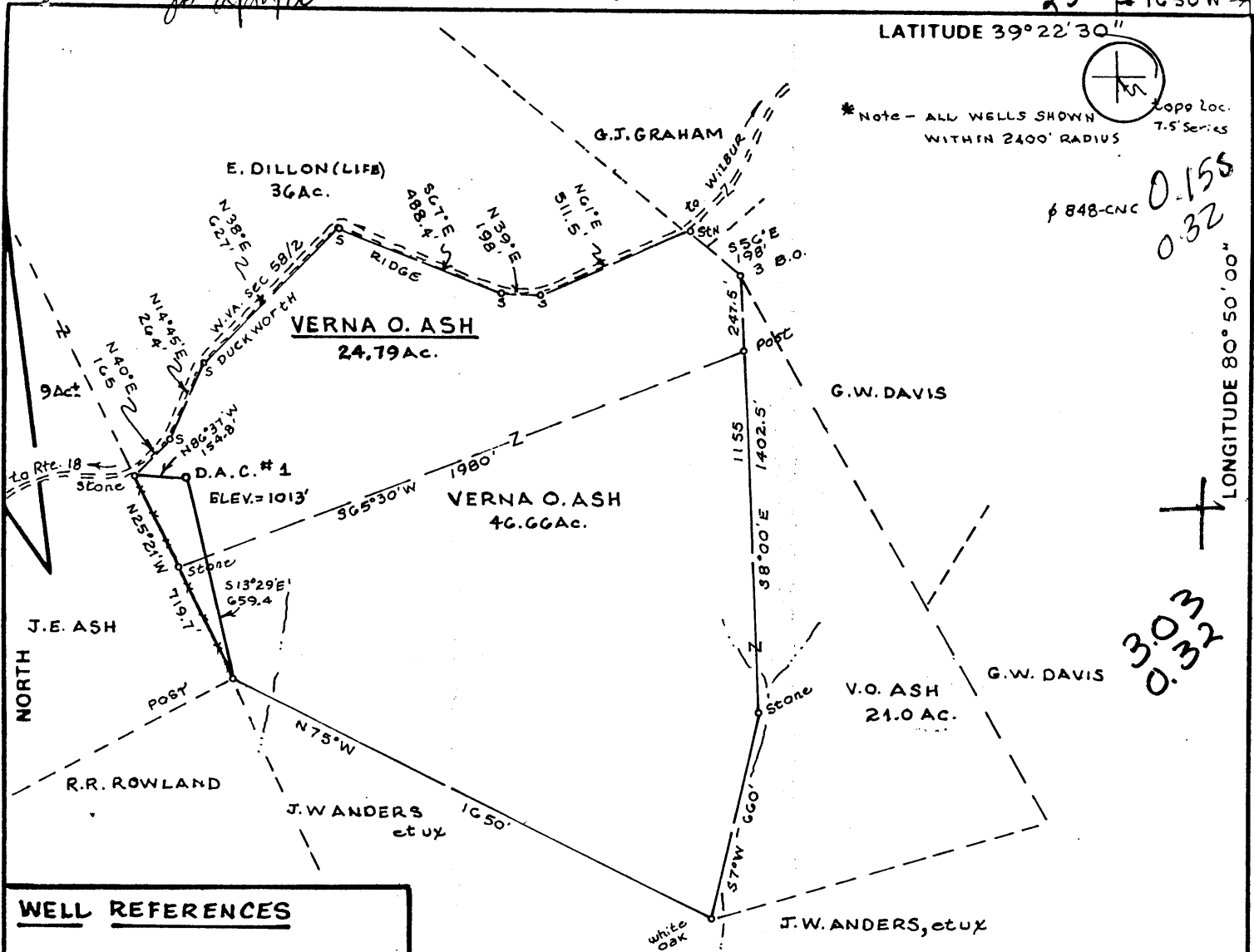


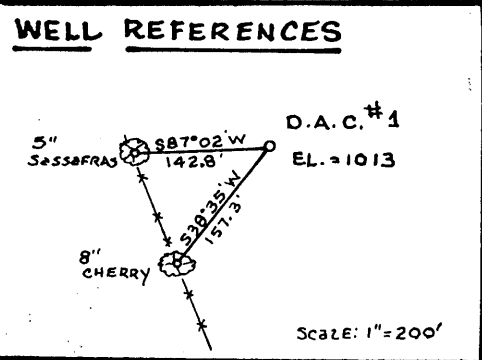
88 2/22/88

25 1650'W



LATITUDE 39° 22' 30"  
 \*Note - ALL WELLS SHOWN WITHIN 2400' RADIUS  
 Topo Loc. 7.5 Series  
 ‡ 848-CNC 0.155  
 0.32

3.03  
 0.32



FILE NO. \_\_\_\_\_  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 500'  
 MINIMUM DEGREE OF ACCURACY 1/200  
 PROVEN SOURCE OF ELEVATION TOP OF KNOB 2350' ±  
 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.

*Mark C. Echard*  
 (SIGNED) MARK C. ECHARD  
 R.P.E. \_\_\_\_\_ L.L.S. 490

PLACE SEAL HERE

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS  
 FORM IV-6 (8-78)

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

LOCATION: ELEVATION 1013' WATER SHED CAMP MISTAKE RUN  
 DISTRICT CENTERVILLE 1 COUNTY TYLER  
 QUADRANGLE WEST UNION 671 133 5 45' C

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

STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION

DATE JANUARY 25, 1988  
 OPERATOR'S WELL NO. V. ASH #1  
 API WELL NO. \_\_\_\_\_  
47 - 095 - 1226  
 STATE COUNTY PERMIT

FEB 20 1988



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

Well Operator's Report of Well Work

**RECEIVED**  
MAR 31 1988

Farm name: ASH, VERNA O.

Operator Well No.: ASH

DIVISION OF OIL & GAS  
DEPARTMENT OF ENERGY

LOCATION: Elevation: 1013.00 Quadrangle: WEST UNION

District: CENTERVILLE County: TYLER

Latitude: 790 Feet South of 39 Des. 22Min. 30 Sec.

Longitude: 1650 Feet West of 80 Des. 50Min. 0 Sec.

Company: DRILLING APPALACHIAN CORP.  
ROUTE 1, BOX 51A  
CAIRO, WV

Asent: KENNETH R. MASON

Inspector: ROBERT LOWTHER  
Permit Issued: 02/22/88  
Well work Commenced: 2/23/88 ✓  
Well work Completed: 3/2/88 ✓  
Verbal Plussings granted on: \_\_\_\_\_  
Permission granted on: \_\_\_\_\_

Casings & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
8-5/8	1170	1125	cts
4-1/2	5140	5032	295 sks

Rotary XX Cable \_\_\_\_\_ Ris \_\_\_\_\_  
Total Depth (feet) 4920  
Fresh water depths (ft) 60  
Salt water depths (ft) 1170  
Is coal beins mined in area (Y/N)? No  
Coal Depths (ft): None

OPEN FLOW DATA

Producing formation Benson Pay zone depth (ft) 4920  
Gas: Initial open flow trace MCF/d Oil: Initial open flow 0 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 1575 psis (surface pressure) after 72 Hours

Second producing formation Riley Pay zone depth (ft) 4510  
Gas: Initial open flow 0 MCF/d Oil: Initial open flow 0 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 above psis (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: DRILLING APPALACHIAN CORP.  
By: Kenneth R. Mason  
Date: March 24, 1988

APR 1 1988

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

Perforate Benson from (4942-4946) with 14 holes .39", frac with 100 sks 80/100  
 350 sks 20/40, 71,000 scf N<sub>2</sub>, and 435 bbls treated fluid. Avg rate = 28 bbls/min  
 Avg psi = 2795 psi

Perforate Riley from 4527-4559 with 14 holes .39" Frac with 50 sks 80/100  
 1555 sks 20/40 40,000 scf N<sub>2</sub>, 225 bbls treated fluid. Avg rate = 19.6 bbls/min  
 Avg psi = 2405#

**WELL LOG**

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas
Dint shale			0	10	
sd			10	1170	
sd			1170	1308	Electric Log Tops ✓
sd			1308	1660	
rr			1660	1720	Big Lime 1858
sd			1720	1858	Berea 2425
lime			1858	1920	Benson 4924
sd			1920	2070	
sh			2070	2280	Hole picked up salt water and oil at 1170'
sd			2280	2330	
sh			2330	TD	
td				5140	

Benson@TD

**RECEIVED**  
 MAR 31 1988

DIVISION OF OIL & GAS  
 DEPARTMENT OF ENERGY

3297

7/85

**RECEIVED**  
FEB 16 1988



1) Date: Feb. 1, 1988  
2) Operator's Well No. Ash #1  
3) API Well No. 47-095- 1226  
State County Permit

STATE OF WEST VIRGINIA  
DEPARTMENT OF ENERGY, OIL AND GAS DIVISION  
DIVISION OF OIL & GAS 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: 1013' Watershed: Camp Mistake Run  
District: Centerville / County: Tyler 095 Quadrangle: West Union 670
- 6) WELL OPERATOR D.A.C. 311 CODE: 14425 7) DESIGNATED AGENT Kenneth Mason  
Address PO Box 99 Address PO Box 99  
Alma, WV 26320-0099 Alma, WV 26320-0099
- 8) OIL & GAS INSPECTOR TO BE NOTIFIED Name Robert Lowther  
Address Middlebourne, WV 26149
- 9) DRILLING CONTRACTOR: Name Burdette Oil & Gas Co.  
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) \_\_\_\_\_
- 11) GEOLOGICAL TARGET FORMATION, Benson/Riley 435
- 12) Estimated depth of completed well, 5300± feet
- 13) Approximate trata depths: Fresh, 177 feet; salt, \_\_\_\_\_ feet.
- 14) Approximate coal seam depths: None Is coal being mined in the area? Yes \_\_\_\_\_ / No
- 15) CASING AND TUBING PROGRAM From Tyler 97, 427, 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									
Coal									
Intermediate	8 5/8	J-55	20	X		1125'	1125'	CTS Neat	Size <u>38CSR18-11.3</u>
Production	4 1/2	J-55	10 1/2	X		5050'	5050'	CTS Neat	Depths set <u>38CSR18-11.1</u>
Tubing									
Lin...									Perforations:
									Top Bottom

OFFICE USE ONLY  
DRILLING PERMIT

Permit number 47-095-1226 February 22, 19 88  
Date

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 February 22, 1990 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond:	Agent:	Plat:	Casing	Fee	WPP	S&E	Other
				5			
				2605			

NOTE: Keep one copy of this permit posted at the drilling location.

[Signature]  
Director, Division of Oil and Gas

File

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