



FILE NO. _____
DRAWING NO. _____
SCALE 1" = 200'
MINIMUM DEGREE OF ACCURACY 1/200
PROVEN SOURCE OF ELEVATION USGS BM ON RT. 4 880' E. NW of LOC., ELEV. = 1455'

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

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 1520' WATER SHED SANDY CREEK
DISTRICT COVE COUNTY BARBOUR
QUADRANGLE COLEBANK 7.5' Belington 15' NC

SURFACE OWNER DONALD BOWMAN ACREAGE 16
OIL & GAS ROYALTY OWNER DONALD BOWMAN LEASE ACREAGE 16
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 HAVERTY BENSON ESTIMATED DEPTH 5500'
WELL OPERATOR EASTERN OVERTHRUST DRILLING COMPANY DESIGNATED AGENT MR. RICHARD HINKLE
ADDRESS P.O. BOX 600 ANMOORE, W.VA. 26323 ADDRESS P.O. BOX 600 ANMOORE, W.VA. 26323

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

DATE NOVEMBER 23, 1981
OPERATOR'S WELL NO. ONE
API WELL NO. _____
47 - 001 - 1668
STATE COUNTY PERMIT

JAN - 8 1982
5-5 Taylor Drain (316)

RECEIVED



IV-35
(Rev 8-81)

JUN 24 1982

OIL AND GAS DIVISION
WV DEPARTMENT OF MINES

State of West Virginia

Department of Mines
Oil and Gas Division

Date June 18, 1982

Operator's

Well No. #1

Farm Donald Bowman

API No. 47 - 001 - 1668

WELL OPERATOR'S REPORT
OF

DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

WELL TYPE: Oil ___ / Gas X / Liquid Injection ___ / Waste Disposal ___ /
(If "Gas," Production X / Underground Storage ___ / Deep ___ / Shallow X /)

LOCATION: Elevation: 1528 Watershed Sandy Criik
District: Cove County Barbour Quadrangle Colebank

COMPANY Eastern Overthrust Drilling
ADDRESS P.O. Box 600 Anmoore, WV 21323
DESIGNATED AGENT Richard Hinkle
ADDRESS P.O. Box 600 Anmoore, Wv 21323
SURFACE OWNER Donald Bowman
ADDRESS _____
MINERAL RIGHTS OWNER Donald Bowman
ADDRESS _____
OIL AND GAS INSPECTOR FOR THIS WORK Bob
Stewart ADDRESS Jane Lew, WV
PERMIT ISSUED 12-7-82
DRILLING COMMENCED 12-13-81
DRILLING COMPLETED 12-29-81
IF APPLICABLE: PLUGGING OF DRY HOLE ON
CONTINUOUS PROGRESSION FROM DRILLING OR
REWORKING. VERBAL PERMISSION OBTAINED
ON _____

Casing & Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft.
Size 20-16 Cond.			
11 3/4	155	155	To surface 300
9 5/8			
8 5/8	1941	1941	10 surface 400
7			
5 1/2			
4 1/2	5544	5544	484 Sks
3			
2		4800	on packer
Liners used			

GEOLOGICAL TARGET FORMATION Elk Depth 5400 feet

Depth of completed well 5550 feet Rotary X / Cable Tools

Water strata depth: Fresh 130 feet; Salt 345 feet

Coal seam depths: 130-140, 447-453, 475-483 Is coal being mined in the area? no

OPEN FLOW DATA

Producing formation Elk, Benson, Balltown Pay zone depth 5175-5205 feet

Gas: Initial open flow smell Mcf/d Oil: Initial open flow none Bbl/d

Final open flow 140 Mcf/d Final open flow show Bbl/d

Time of open flow between initial and final tests 4 hours

Static rock pressure 1200 psig (surface measurement) after 72 hours shut in

(If applicable due to multiple completion--)

Second producing formation Pay zone depth feet

Gas: Initial open flow Mcf/d Oil: Initial open flow Bbl/d

Final open flow Mcf/d Oil: Final open flow Bbl/d

Time of open flow between initial and final tests hours

Static rock pressure psig (surface measurement) after hours shut in

JUN 28 1982
(Continue on reverse side)

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

3-7-81

			<u>Sand</u>	<u>BBL</u>	<u>PSI</u>	
Elk	(4555-5421)	22	65,000	650	3900#	Water Frac
Benson-Elk	(4009-4317)	17	80,000	634	3950#	Water Frac
Balltown	(3094-3239)	29	55,000	830	2500#	Foam Frac

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	<u>REMARKS</u>
					Including indication of all fresh and salt water, coal, oil and gas
Shale	gr	s	0	138	Water at 345', 460' & 510'
Coal	bl	s	138	140	
Shale	gr	s	140	447	Check gas at TD, No show
Coal	bl	s	447	453	
Shale	gr	s	453	507	
Sand	w	h	507	650	
Shale	gr & red	s	650	786	
Sand	w	h	786	830	
Shale	red & gr	s	830	1325	
Big Lime	br	h	1325	1475	
Injun	w	h	1475	1520	
Shale	gr	s	1520	1930	
4th Sand	w	h	1930	2190	
Shale	gr	s	2190	2215	
5th Sand	w	h	2215	2437	
Shale	gr	s	2437	3090	
Sand	w	h	3090	3245	
Shale	gr	s	3245	3990	
Benson	br	m	3990	4030	
Shale	gr	s	4030	4285	
Elk	br gr	s	4285	5430	
Shale	gr	s	5430	5578	
TD				5578	

(Attach separate sheets as necessary)

Eastern Overthrust Drilling, Inc.

Well Operator

By: Richard L. Hinkle Richard L. Hinkle, Pres.

Date: June 21, 1982

Note: Regulation 2.02(i) provides as follows:

"The term 'log' or 'well log' shall mean a systematic detailed geological record of all formations, including coal, encountered in the drilling of a well."



Well No. 1
Farm Donald Bowman
API # 47-001-1668
Date 11-27-81

RECEIVED
STATE OF WEST VIRGINIA
NOV 30 1981

OFFICE OF OIL AND GAS - DEPARTMENT OF MINES

RECEIVED
NOV 30 1981

OIL AND GAS WELL PERMIT APPLICATION

WELL TYPE: Oil / Gas X /

(If "Gas", Production X / Underground storage / Deep / Shallow X /

LOCATION: Elevation: 1528 Watershed: Sandy Creek
District: Cove County: Barbour Quadrangle: Cole Bank 7 1/2

WELL OPERATOR Eastern Overthrust Drilling Corp DESIGNATED AGENT Richard Hinkle
Address P. O. Box 600 Address P. O. Box 600
Annoore, W. Va. 26323 Annoore, W. Va. 26323

OIL AND GAS OWNER
ROYALTY OWNER Donald Bowman COAL OPERATOR (1) Eastern Associated Coal Co. (1/2)
Address Address

Acreage 16

SURFACE OWNER Donald Bowman COAL OWNER(S) WITH DECLARATION ON RECORD:
Address NAME (2) Sarah Mellon Scaife Foundation
Acreage 16 Address

NAME (3) Charleston National Bank (Henry Hoffstot, Trust)
Address

FIELD SALE (IF MADE) TO:
NAME
Address

COAL LESSEE WITH DECLARATION ON RECORD:
NAME
Address

OIL AND GAS INSPECTOR TO BE NOTIFIED:

NAME Robert Stewart
Address P. O. Box 345
Jane Lew, W. Va. 26378
Telephone 884-7782

The undersigned well operator is entitled to operate for oil or gas purposes at the above location under a deed / lease X / other contract / dated 9/3, 1981, to the undersigned well operator from Beckler Energy Co.

(If said deed, lease, or other contract has been recorded:)

Recorded on , 19 , in the office of the Clerk of County Commission of

Barbour County, West Virginia, in Lease 88 Book at page 81. A permit is requested as follows:

PROPOSED WORK: Drill X / Drill Deeper / Redrill / Fracture or stimulate / Plug off old formation / Perforate new formation / Other physical change in well (specify)

--planned as shown on the work order on the reverse side hereof.

The above named coal operator, coal owner(s), and coal lessee are hereby notified that any objection they wish to make or are required to make by Code §22-4-3 must be filed with the Department of Mines within fifteen (15) days after receipt of this Application by the Dept. Copies of this Permit Application and the enclosed plat and reclamation plan have been mailed by registered mail or delivered by hand to the above named coal operator, coal owner(s), and coal lessees on or before the day of the mailing or delivery of this Application to the Department of Mines at Charleston, West Virginia.

PLEASE SUBMIT COPIES OF ALL GEOPHYSICAL LOGS DIRECTLY TO:

WEST VIRGINIA OIL AND GAS CONSERVATION COMMISSION
1613 WASHINGTON ST., E.
CHARLESTON, WV 25311
Telephone - 304/348-3092

Richard Hinkle
Well Operator

By:

Its:

(Revised 3-81)

PROPOSED WORK ORDER

THIS IS AN ESTIMATE ONLY:
ACTUAL INFORMATION MUST BE SUBMITTED ON FORM IV-35 UPON COMPLETION

DRILLING CONTRACTOR (IF KNOWN) _____

Address _____

GEOLOGICAL TARGET FORMATION Elk - Haverty

Estimated depth of completed well 5500 feet. Rotary X / Cable tools /
Approximate water strata depths: Fresh, 40 feet; salt, 600 feet.
Approximate coal seam depths: 170 - 280
Is coal being mined in this area: Yes / No X /

CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	SPECIFICATIONS				FOOTAGE INTERVALS		CEMENT FILL UP OR SACKS Cubic ft.	PACKERS
	Size	Grade	Weight per ft	New	Used	For Drill-ling		
Conductor	11 3/4			X		30		Kinds
Fresh water								
Coal								Sizes
Intermed.	8 5/8						1500	To Surface
Production Tubing	4 1/2						5500	500 Sks. Depths set
Liners								Perforations: Top Bottom

NOTE: Regulation 7.02 of the Department of Mines provides that the original and four copies of Form IV-2 must be filed with the Department, accompanied by (i) a plat in the form prescribed by Regulation 11, (ii) a bond in one of the forms prescribed by Regulation 12, or in lieu thereof the other security allowed by Code §22-4-2, (iii) Form IV-9, "Reclamation Plan" applicable to the reclamation required by Code §22-4-12b and Regulation 23, (iv) unless previously paid on the same well, the fee required by Code §22-4-12a, and (v) if applicable, the consent required by Code §22-4-8a from the owner of any water well or dwelling within 200 feet of the proposed well.

A separate Form IV-2 shall not be required for fracturing or stimulating a well where fracturing or stimulating is to be part of the work for which a permit is sought and is noted as such on the Form IV-2 filed in connection therewith.

THIS PERMIT MUST BE POSTED AT THE WELL SITE

All provisions being in accordance with Chapter 22 of the W. Va. Code, the location is hereby approved for Drilling. This permit shall expire if operations have not commenced by 8-7-82.

[Signature]
Deputy Director - Oil & Gas Division

The following waiver must be completed by the coal operator and by any coal owner or coal lessee who has recorded a declaration under Code §22-4-20, if the permit is to be issued within fifteen (15) days of receipt thereof:

W A I V E R

The undersigned coal operator / owner / lessee / of the coal under this well location has examined this proposed well location. If a mine map exists which covers the area of the well location, the well location has been added to the mine map. The undersigned has no objection to the work proposed to be done at this location, provided the well operator has complied with all applicable requirements of the West Virginia Code and the governing regularions.

Date: _____, 19____.

By: _____

Its: _____