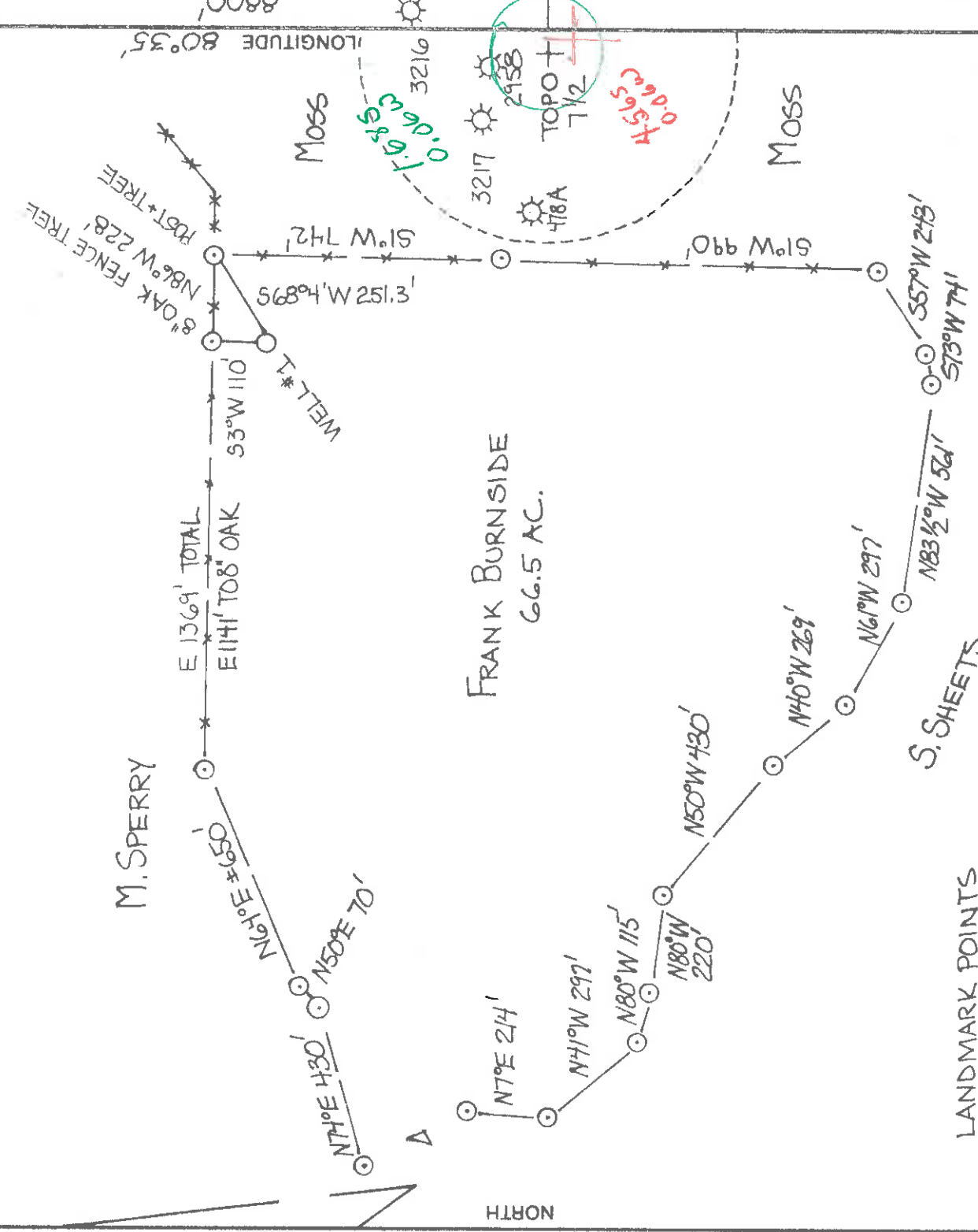


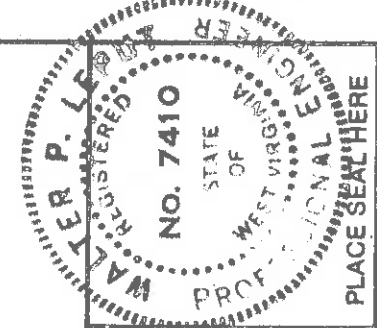
7/12/85

CODE CAPD UNIT PINT

LATITUDE 39°12'30" LONGITUDE 80°35'39.15"



LANDMARK POINTS  
 N18°E 114' FROM WELL TO 12" OAK ON FL  
 N45°E 144' FROM WELL TO 2' OAK ON FL



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

FILE NO. 7-1-85  
 DRAWING NO. 7-1-85  
 SCALE 1" = 400'  
 MINIMUM DEGREE OF ACCURACY 1 IN 200  
 PROVEN SOURCE OF ELEVATION 4 OF ROAD AT INT. 1500 ± EAST (947)

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) Walter P. Lee  
 R.P.E. 7410 L.L.S.

STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION

DATE JULY 1 19 85  
 OPERATOR'S WELL NO. #1  
 API WELL NO. 47-017-3464

WELL TYPE: OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL   
 (IF "GAS,") PRODUCTION  STORAGE  DEEP  SHALLOW   
 LOCATION: ELEVATION 1221 WATER SHED DRY FORK  
 DISTRICT GREENBRIER COUNTY DODDRIDGE  
 QUADRANGLE 25A Big Isaac 1/2 2nd 1/2 123 NE 2  
 SURFACE OWNER LL Moss ACREAGE 66.5  
 OIL & GAS ROYALTY OWNER FRANK BURNSIDE LEASE ACREAGE 66.5

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 ELK ESTIMATED DEPTH 5600'  
 WELL OPERATOR HYDROCARBON EXPLORATION, INC. DESIGNATED AGENT AL SORCAN  
 ADDRESS PO DRAWER 976 392 ADDRESS PO DRAWER 976  
BUCKHANNON W.VA. BUCKHANNON W.VA.

6-6 Meathouse Fork - Bristol (146)

IV-35  
(Rev 8/83)

**RECEIVED**

OCT 15 1985

DIVISION OF OIL & GAS  
**DEPT. OF ENERGY**

State of West Virginia

Department of Mines  
Oil and Gas Division

Date 10/09/85  
Operator's Burnside #1  
Well No. Burnside #1  
Farm D.K. Moss

API No. 47 - 017 - 3464

WELL OPERATOR'S REPORT  
OF

DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

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

LOCATION: Elevation: 1221 Watershed Dry Fork  
District: Greenbrier County Doddridge Quadrangle Big Issac 7 1/2

COMPANY Hydrocarbon Exploration, Inc.  
ADDRESS P.O. Drawer 976 Buckhannon, WV 26201  
DESIGNATED AGENT Alvin Sorcan  
ADDRESS Rt. 4, Box 444 Buckhannon, WV 26201  
SURFACE OWNER David Kent Moss  
ADDRESS Rt. 2, Box 201 Buckhannon, WV 26201  
MINERAL RIGHTS OWNER Frank Burnside Heirs  
ADDRESS Stoneybrooke Rd., Clarksburg, WV  
OIL AND GAS INSPECTOR FOR THIS WORK Mike

Underwood ADDRESS \_\_\_\_\_  
PERMIT ISSUED 8/15/85  
DRILLING COMMENCED 9/10/85  
DRILLING COMPLETED 9/16/85

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 <del>13 3/4</del>	220	220	100 sks
9 5/8	1730	1730	400 sks
8 5/8			1730 to surface
7			
5 1/2			
4 1/2	5690	5690	710 sks
3			5690-2300
2			
Liners used			

GEOLOGICAL TARGET FORMATION Elks Depth 5650 feet  
Depth of completed well 5710 feet Rotary X / Cable Tools \_\_\_\_\_  
Water strata depth: Fresh 163 feet; Salt 1542 feet  
Coal seam depths: 142-144 Is coal being mined in the area? No

OPEN FLOW DATA

Producing formation Elks Pay zone depth 5500-5600 feet  
Gas: Initial open flow 60 Mcf/d Oil: Initial open flow Bbl/d  
Final open flow 103 Mcf/d Final open flow 2 Bbl/d

Time of open flow between initial and final tests 4 hours  
Static rock pressure 1020 psig (surface measurement) after 48 hours shut in

(If applicable due to multiple completion--)

Second producing formation Balltown, Speechly Pay zone depth 3450-3880 feet  
Gas: Initial open flow \_\_\_\_\_ Mcf/d Oil: Initial open flow show Bbl/d  
Final open flow 103 Mcf/d Oil: Final open flow 2 Bbl/d

Time of open flow between initial and final tests \_\_\_\_\_ hours  
Static rock pressure 1020 psig (surface measurement) after 48 hours shut in

OCT 28 1985 (Continue on reverse side)

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

	4 Stage	H2O w/CO2	Assist	9/24/85	ISIP	CO2
Frac	Perf	Brk.	Sand	H2O	1200	106 mscf
Alexander	5463-5612	2830	40,000	470	1600	78 mscf
Benson	5022-5180	2700	40,000	540	2350	127 mscf
Balltown	3712-3880	2200	60,000	508	800	104 mscf
Spechly	3450-3626	2750	35,000	400		

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
Shale	Gray	Soft	0	26	Including indication of all fresh and salt water, coal, oil and gas
Sand	Brown	Medium	26	118	
Sandy Shale	Brown	Soft	118	131	H2O 163,
Sand	Brown	Medium	131	142	
Coal	Black	Soft	142	144	Coal 142, 1449
Sand	Brown	Medium	144	150	
Shale-Sand	Brown	Medium	150	299	Water 1 1/2" 1542
Shale	Red-Gr	Medium	299	1449	
Coal	Black	Soft	1449	1453	Show of oil 3400'
Shale-Sand	Brown	Medium	1453	1503	
Sand	White	Hard	1503	1558	Gas Check TD 60 mcf
Shale	Brown	Soft	1558	1604	
Sand	Brown	Hard	1604	1636	Top Dev ~ 2530'
Shale-Sand	Gray	Medium	1636	2095	
L. Lime	Gray	Hard	2095	2102	Show of oil 3400'
Shale	Brown	Soft	2102	2125	
Big Lime	Gray	Hard	2125	2196	Gas Check TD 60 mcf
Big Injun	White	Hard	2196	2280	
Shale-Sand	Brown	Medium	2280	2720	Top Dev ~ 2530'
Sand	Brown	Hard	2720	2766	
Sand	Brown	Hard	2766	2830	Show of oil 3400'
Sand-Shale	Brown	Medium	2830	2850	
Sand	Brown	Hard	2850	3440	Top Dev ~ 2530'
Shale	Brown	Soft	3440	3620	
Spechly	Brown	Medium	3620	3880	Show of oil 3400'
Balltown	Brown	Soft	3880	5020	
Shale	Brown	Hard	5020	5180	Top Dev ~ 2530'
Benson	Brown	Soft	5180	5450	
Shale	Gray	Soft	5450	5620	Show of oil 3400'
Elk	Brown	Medium	5620	5710	
Shale	Gray	Soft	5710		

(Attach separate sheets as necessary)

HYDROCARBON EXPLORATION, INC.  
Well Operator

By: Alvin Davis

Date: 10-10-85

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 well, encountered in the drilling of a well."

**FILE COPY**  
**RECORDED**

JUL 8 1985

- 1) Date: July 3, 19 85  
 2) Operator's Well No.: BURNSIDE #1  
 3) API Well No.: 47-3464 State WVA County Permit



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

Oil & Gas Division  
 WELL TYPE: Oil  Gas

- 4) **WELL LOCATION:** B (If "Gas", Production  / Underground storage   
 Elevation: 1221 Watershed: DRY Fork of Menthouse Fork Deep  Shallow   
 District: GREENBRIER County: Doddridge Quadrangle: 7 1/2 Big ISSAC  
 5) **WELL OPERATOR:** Hydrocarbon Exploration Inc. (3927) DESIGNATED AGENT ALVIN SORCAN  
 Address P.O. DRAWER 976 Address P.O. DRAWER 976  
Buckhannon W.V. 26201 23625  
 6) **OIL & GAS INSPECTOR TO BE NOTIFIED:** Name MIKE UNDERWOOD 9) **DRILLING CONTRACTOR:**  
 Address Rt. 2 Box 114 Name Buckhannon W.V. 26201  
Salem W.V. 26426 Address Buckhannon W.V. 26201

10) **PROPOSED WELL WORK:** Drill  / deeper  / Redrill  / Stimulate   
 Plug off old formation  / Perforate new formation   
 Other physical change in well (specify) EIK 437

11) **GEOLOGICAL TARGET FORMATION:** EIK feet  
 12) Estimated depth of completed well, 5800 feet  
 13) Approximate true depths: Fresh, 40 feet; salt, 5800-8900 feet.  
 14) Approximate coal seam depths: 130 Is coal being mined in the area? Yes  No

15) **CASING AND TUBING PROGRAM**

CASING OR TUBING TYPE	SPECIFICATIONS		New	Used	FOOTAGE INTERVALS		CEMENT FILL-UP OR SACS (Cubic feet)	PACKERS
	Size	Grade			Weight per ft.	For drilling		
Conductor	11 3/4			<input checked="" type="checkbox"/>	200	200	To Surface	
Fresh water								
Coal	8 5/8			<input checked="" type="checkbox"/>	1700	1700	To Surface	
Intermediate	8 5/8			<input checked="" type="checkbox"/>	1700	1700	To Surface	
Production	4 1/2			<input checked="" type="checkbox"/>	5700	5700	700 SKS	
Tubing								
Liners								

OFFICE USE ONLY  
 DRILLING PERMIT

Permit number 47-017-3464 Date August 15 1985

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 August 15, 1987 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond: <input checked="" type="checkbox"/>	Agent: <u>MH</u>	Plat: <u>MH</u>	Casing Fee
			<u>2056</u>

*[Signature]*

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

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

File

