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PV-35
(Rev 8-81)

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DIVISION OF OIL & GAS
DEPT. OF ENERGY

State of West Virginia
Department of ~~Energy~~
Oil and Gas Division

Date 12/13/85
Operator's
Well No. #1
Farm Harness
API No. 47 - 107 - 1355

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 / Underground Storage / Deep / Shallow X /)

LOCATION: Elevation: 685' Watershed Bull Creek
District: Union County Wood Quadrangle Willow Island

COMPANY Cuyahoga Exploration & Development Corp.

ADDRESS Route #1, Marietta, Ohio 45750

DESIGNATED AGENT Roger Hunter

ADDRESS P. O. Box 1386, Charleston, WV 25325

SURFACE OWNER Lulu Harness et al

ADDRESS Highland Ave. Williamstown, WV 26187

MINERAL RIGHTS OWNER Lulu Harness

ADDRESS Highland Ave., Williamstown, WV 26187

OIL AND GAS INSPECTOR FOR THIS WORK Robert
Lowther General Delivery
ADDRESS Middlebourne, WV 26101

PERMIT ISSUED 3-1-85

DRILLING COMMENCED 4-12-85

DRILLING COMPLETED 4-17-85

IF APPLICABLE: PLUGGING OF DRY HOLE ON
CONTINUOUS PROGRESSION FROM DRILLING OR
REWORKING. VERBAL PERMISSION OBTAINED
ON N/A

Casing & Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft.
Size 20-16 Cond.			
13-10"			
9 5/8	208	208	SURFACE
8 5/8			
7	1843	1843	1000
5 1/2			
4 1/2	3820	3820	1977
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Devonian Shale Depth 3832' feet

Depth of completed well 3832' feet Rotary X / Cable Tools

Water strata depth: Fresh N/A feet; Salt 1605' feet

Coal seam depths: N/A Is coal being mined in the area? No

OPEN FLOW DATA

Producing formation Berea Pay zone depth 2027-2046 feet

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

Final open flow N/A Mcf/d Final open flow N/A Bbl/d

Time of open flow between initial and final tests N/A hours

Static rock pressure 475 psig(surface measurement) after N/A hours shut in
(If applicable due to multiple completion--)

Second producing formation Gantz Pay zone depth 2144-2148 feet

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

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

Time of open flow between initial and final tests N/A hours

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

Berea Gantz Gordon Frac Together

Gordon Pay Zone Depth ~~2394'~~ - ~~2430'~~

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

PERFORATION

105 Sacks 20/40 Sand	4'	4 holes	2030' - 2034'	} Beria
Breakdown 1700 PSI	4'	4 holes	2040' - 2044'	
3 pump trucks	5'	5 holes	2143' - 2148'	} Gantz
950 gal HCL 15%	3'	3 holes	2403' - 2406'	
Avg. PSI 200	4'	4 holes	2411' - 2415'	} Gordon
AVG.BBL Per Min 41	6'	6 holes	2420' - 2426'	
Total Gal pumped 56,130.				

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas
Red Rock & Clay			0'	800'	
First Salt Sand			934'	966'	
Second Salt Sand			1060'	1200'	
Third Salt Sand			1250'	1330'	
Maxton			1375'	1420'	
Big Injun-Squaw			1490'	1721'	
Weir			1774'	1791'	
Welsh Stray			1968'	1970'	
Berea			2029'	2044'	
Devonian Shale			2044'		
Gantz			2143'	2149'	
Thirty-foot			2268'	2295'	
Gordon			2394'	2428'	
Speechly/Balltown			3469'	3487'	
Total Depth				3832'	
				Huron @ TD.	

From nearby well top thickness
Up: Dev and H! 2044 1250
Lnd Huron 3294

(Attach separate sheets as necessary)

Cuyahoga Exploration and Development Corporation

Well Operator

By: Timothy Anderson Field Co-ordinator

Date: _____

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."

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MAR 1 1985



1) Date: February 26, 19 85
2) Operator's Well No. Harness #1
3) API Well No. 47 - 107 - 1355
State County Permit

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES, OIL AND GAS DIVISION

OIL & GAS DIVISION

APPLICATION FOR A WELL WORK PERMIT

DEPT. OF MINES

- 1) WELL TYPE: A OR Gas X
2) LOCATION: Elevation: 685, Watershed: Bull Creek, District: Union, County: Wood, Quadrangle: willow Island
3) WELL OPERATOR: Cuyahoga Exp. & Dev. Corp., Address: Route 1, Marietta, OH 45750
4) DESIGNATED AGENT: Roger Hunter, Address: P. O. Box 1386, Charleston, WV 25325
5) OIL & GAS INSPECTOR TO BE NOTIFIED: Name: Robert Lowther, Address: General Delivery, Middlebourne, WV 26149
6) DRILLING CONTRACTOR: Name: not yet determined
7) PROPOSED WELL WORK: Drill X, Drill deeper, Redrill, Stimulate X
8) GEOLOGICAL TARGET FORMATION: Devonian Shale/Benson Formation
9) Estimated depth of completed well: 5,000 feet
10) Approximate trata depths: Fresh, 100 feet; salt, 1,500 feet.
11) Approximate coal seam depths: not applicable Is coal being mined in the area? Yes No X

15) CASING AND TUBING PROGRAM

Table with columns: CASING OR TUBING TYPE, SPECIFICATIONS (Size, Grade, Weight per ft., New, Used), FOOTAGE INTERVALS (For drilling, Left in well), CEMENT FILL-UP OR SACKS (Cubic feet), PACKERS (Kinds, Sizes, Depths, Perforations: Top, Bottom)

OFFICE USE ONLY
DRILLING PERMIT

Permit number 47-107-1355

March 1, 19 85
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 March 1, 1987 unless well work is commenced prior to that date and prosecuted with due diligence.

Table with columns: Bond (52), Agent (MH), Plat (MH), Casing (MH), Fee (1240)

Margaret J. Hesse
Administrator, Office of Oil and Gas

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

File

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