

Long. - 81° 21'05.2"

5,120'

LATITUDE 39° 20' 00"

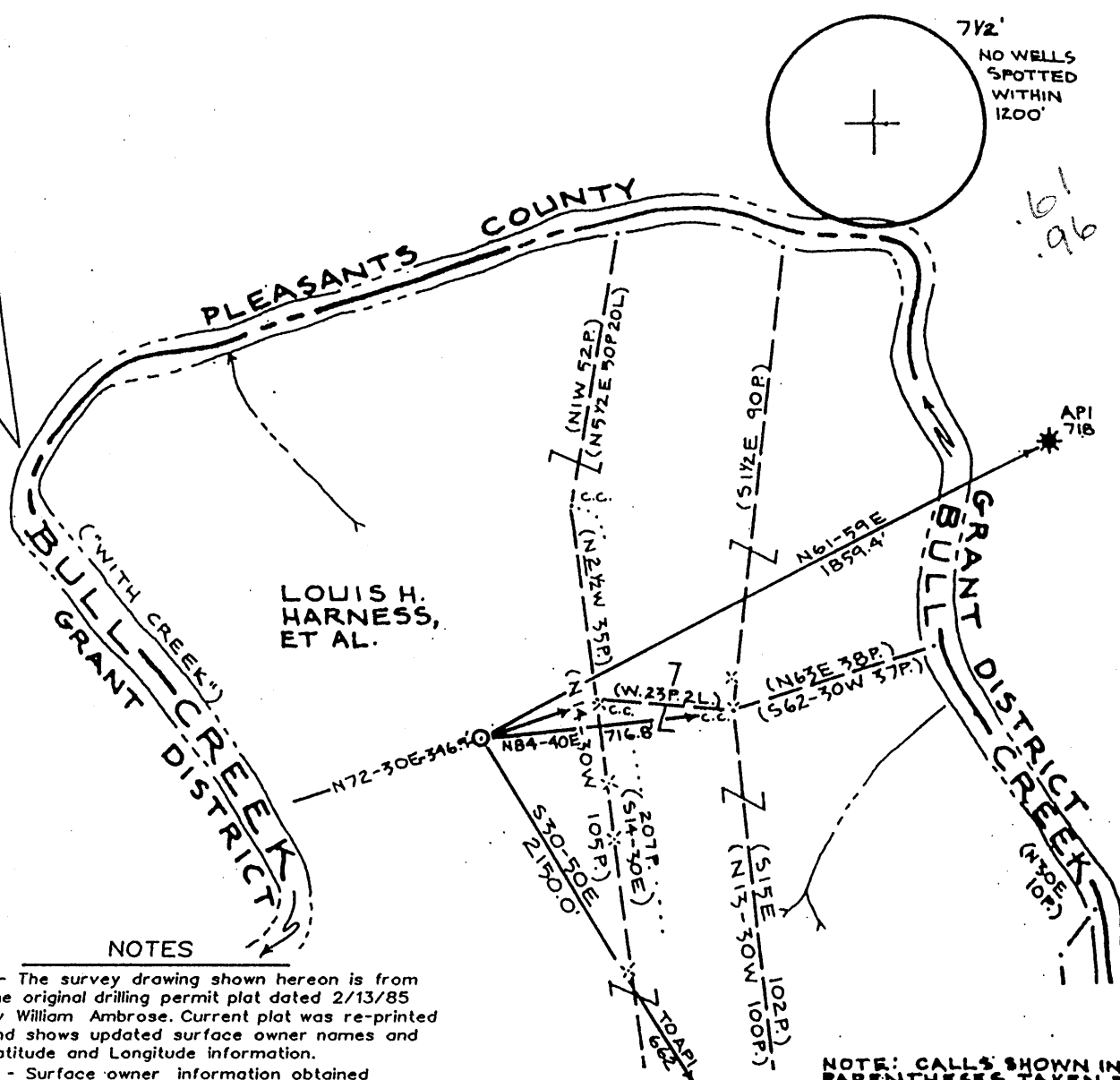
C.C.: COR. CALCULATED FROM  
FEN. LOCATION & DEED CALLS  
- NO PHYSICAL EVIDENCE FOUND -

LOCATION TIES: 6" SOURWOOD N74-51W 154.0'  
10" PINE N72-37E 143'

LONGITUDE 81° 20' 00"

Lat. - 39° 19'34.4"

3,270'



NOTES

- 1 - The survey drawing shown hereon is from the original drilling permit plat dated 2/13/85 by William Ambrose. Current plat was re-printed and shows updated surface owner names and Latitude and Longitude information.
- 2 - Surface owner information obtained from the Wood County Assessor's office.
- 3 - Well Latitude and Longitude established by scaling from Willow Island 7.5' Quadrangle.

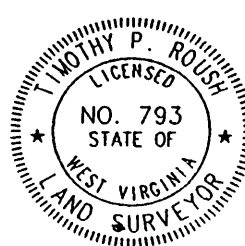
NOTE: CALLS SHOWN IN PARENTHESES TAKEN FROM DEED DESCRIPTIONS.

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

FILE NO. 21-15  
 DRAWING NO. 2  
 SCALE 1" = 500'  
 MINIMUM DEGREE OF ACCURACY 1 in 200  
 PROVEN SOURCE OF ELEVATION WVDEP Records

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) *[Signature]*  
 TIMOTHY P. ROUSH PS 793



WEST VIRGINIA  
 Division of Environmental Protection  
 Office of Oil and Gas  
 1356 Hansford St.  
 Charleston, West Virginia 25301



DATE April 17, 2001  
 FARM Harness NO. 5  
 API WELL NO. 47-107-013.58F

WELL TYPE: OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL   
 (IF "GAS") PRODUCTION  STORAGE  DEEP  SHALLOW   
 LOCATION: ELEVATION 719' WATERSHED Bull Creek  
 DISTRICT Union COUNTY Wood  
 QUADRANGLE Willow Island 7.5'

SURFACE OWNER William Anderson ACREAGE 90 Ac.  
 OIL & GAS ROYALTY OWNER Louis H. Harness, et al. LEASE ACREAGE 215 Ac.

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 Shale ESTIMATED DEPTH 3817'  
 WELL OPERATOR GasSearch Corporation DESIGNATED AGENT Noble Zickefoose  
 ADDRESS \*13 Industrial Boulevard ADDRESS \*13 Industrial Boulevard  
Parkersburg, WV 26101 Parkersburg, WV 26101

JUN - 1 2001

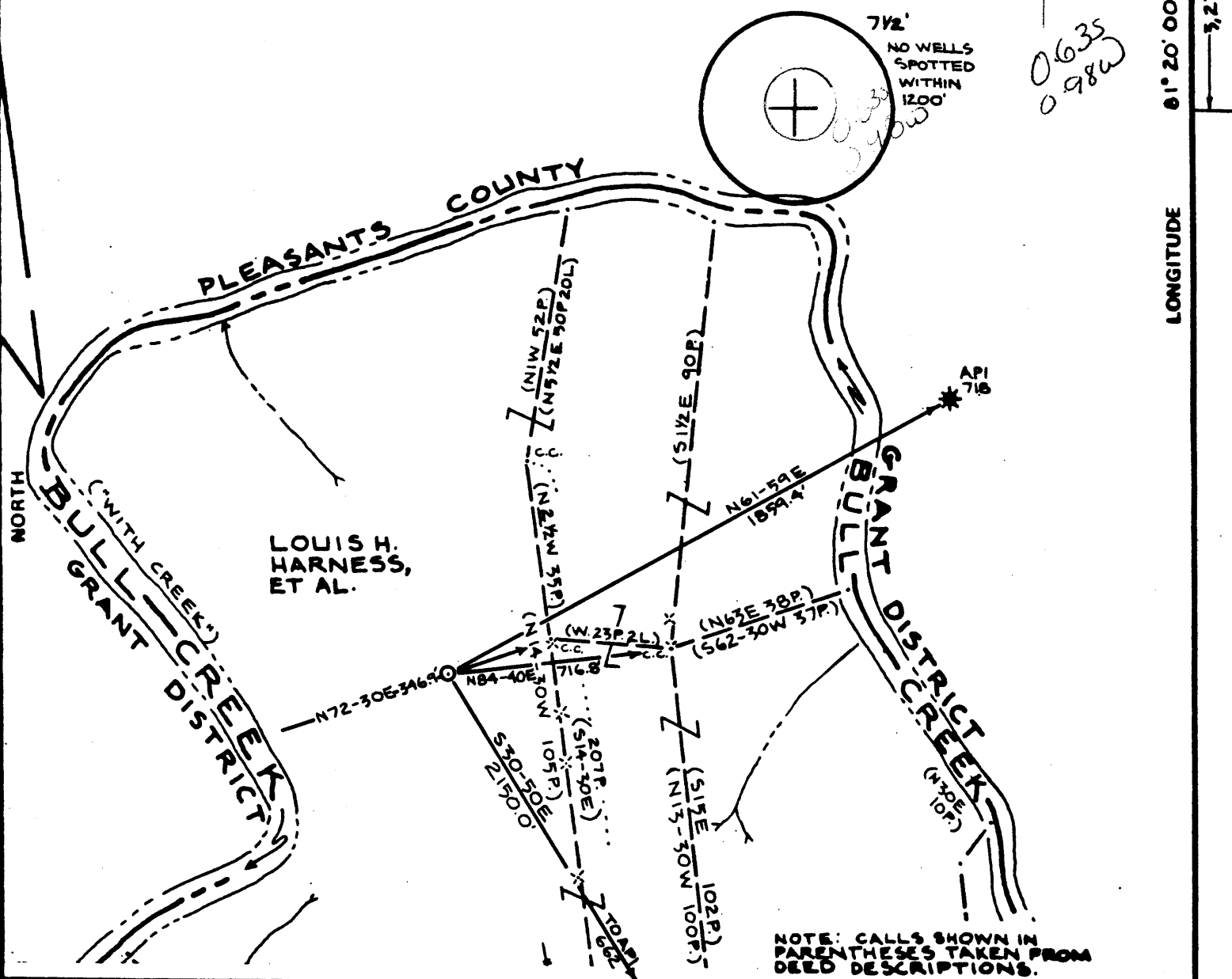
WOOD 1358F

C.C.: COR. CALCULATED FROM \_\_\_\_\_ CARD \_\_\_\_\_ PLOT \_\_\_\_\_  
 FEN. LOCATION & DEED CALLS  
 - NO PHYSICAL EVIDENCE FOUND -  
 LOCATION TIES: 6" SOURWOOD N74-51W 154.0'  
 10" PINE N72-37E 143'

LATITUDE 39° 20'

5,120'

LONGITUDE 81° 20' 00"  
 3,270'



FILE NO. 85114  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 500'  
 MINIMUM DEGREE OF ACCURACY 1:200  
 PROVEN SOURCE OF ELEVATION USGS MONUMENT "791"

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) William Ambrose  
 R.P.E. \_\_\_\_\_ L.L.S. 568

PLACE SEAL HERE

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



DATE 13 FEBRUARY 1985  
 OPERATOR'S WELL NO. HARNESS # 5  
 API WELL NO. 47-107-1358  
 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 719 WATER SHED BULL CREEK  
 DISTRICT UNION COUNTY WOOD  
 QUADRANGLE WILLOW ISLAND Marietta 15' 50  
 SURFACE OWNER LOUIS H. HARNESS, ET AL. ACREAGE 90  
 OIL & GAS ROYALTY OWNER \_\_\_\_\_ LEASE ACREAGE 215  
 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 DEVONIAN SHALE ESTIMATED DEPTH 5000'  
 WELL OPERATOR CUYAHOGA EXPLORATION DESIGNATED AGENT ROGER HUNTER  
 ADDRESS ROUTE 1 MARIETTA OHIO 45750 ADDRESS P.O. BOX 1386 CHARLESTON WEST VIRGINIA 25325  
 20

MAR 11 1985

State of West Virginia  
Division of Environmental Protection  
Section of Oil and Gas

Reviewed \_\_\_\_\_

Well Operator's Report of Well Work

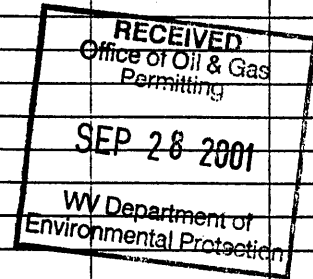
Farm name: Anderson Operator Well No.: Harness #5

LOCATION: Elevation: 719' Quadrangle: Willow Island 7.5'

District: Union County: Wood  
Latitude: 3270 Feet South of 39 Deg. 19 Min. 34.4 Sec.  
Longitude 5120 Feet West of 81 Deg. 21 Min. 5.2 Sec.

Company: GasSearch Corporation

	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Address: #13 Industrial Blvd.	9 5/8"	213'	213'	to surface
Parkersburg, WV 26101	7"	1885'	1885'	to 1000'
Agent: Noble Zickefoose	4 1/2"		3818'	to 2020
Inspector: Larry Parrish				
Date Permit Issued: 05/30/01				
Date Well Work Commenced: 6/5/01				
Date Well Work Completed: 6/5/01				
Verbal Plugging:				
Date Permission granted on:				
Rotary Cable Rig				
Total Depth (feet): 3826				
Fresh Water Depth (ft.): None Recorded				
Salt Water Depth (ft.): 1406'				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.):				



OPEN FLOW DATA

Producing formation Berea-Gordon Pay zone depth (ft) 2076' - 2469'  
 Gas: Initial open flow N/A MCF/d Oil: Initial open flow N/A Bbl/d  
 Final open flow 38.52 MCF/d Final open flow 4.7 Bbl/d  
 Time of open flow between initial and final tests N/A Hours  
 Static rock Pressure 500 psig (surface pressure) after 24 Hours

Second producing formation Berea-Balltown Pay zone depth (ft) 2076' to 3556'  
 Gas: Initial open flow N/A MCF/d Oil: Initial open flow N/A Bbl/d  
 Final open flow 200 MCF/d Final open flow 8 Bbl/d  
 Time of open flow between initial and final tests N/A Hours  
 Static rock Pressure 350 psig (surface pressure) after 48 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.

Signed: Noble Zickefoose  
By: Noble Zickefoose  
Date: 09/25/01

OCT 5 2001

WDDO 1358 F

1st Stage (1985): Berea, Gantz, Gordon (2076' to 2469') 11,000 lb  
20-40 Sand, 1,388 BBL of treated water.

2nd Stage (2001): Berea, Gantz, Gordon, Speechly, Balltown  
(2076' to 3556') 955 MCFN<sub>2</sub> at 50 MPM.

<u>FORMATION</u>	<u>TOP FEET</u>	<u>BOTTOM FEET</u>	<u>REMARKS</u>
Sand, Shale, Red Rock	0	985	
Salt Sands	985	1338	
Shale	1338	1433	
Maxon	1433	1466	
Shale	1466	1525	
Big Injun-Squaw	1525	1763	
Siltstone, Shale	1763	2075	
Berea	2075	2097	
Shale	2097	2191	
Gantz	2191	2195	
Shale	2195	2306	
Thirty Foot Sand	2306	2340	
Shale	2340	2442	
Gordon	2442	2470	
Shale	2470	3050	
Speechly	3050	3350	
Balltown	3350	3650	
Shale	3650	3826 - TD	

WR-35

RECEIVED  
DEC 16 1985



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. #5  
Farm Harness  
API No. 47 - 107 - 1358

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: 719 Watershed Bull Creek  
District: Union County Wood Quadrangle Willow Island

COMPANY Cuyahoga Exp. & Dev. 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 et al

ADDRESS Highland Ave., Williamstown, WV 26187

OIL AND GAS INSPECTOR FOR THIS WORK Mike

Underwood ADDRESS Route #2, Box 135  
Salem, WV 26426

PERMIT ISSUED 3-5-85

DRILLING COMMENCED 5-4-85

DRILLING COMPLETED 5-9-85

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	213'	213'	213'
8 5/8			
7	1885'	1885'	1000'
5 1/2			
4 1/2	3818'	3818'	1933'
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Devonian Shale Depth 3826' feet

Depth of completed well 3826 feet Rotary X / Cable Tools   

Water strata depth: Fresh N/A feet; Salt 1406' feet

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

OPEN FLOW DATA

Producing formation Berea Pay zone depth 2076'-2098' feet

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

Final open flow 38.52 Mcf/d Oil: Final open flow 4.7 Bbl/d

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

Static rock pressure 500 psig (surface measurement) after 24 hours shut in

(If applicable due to multiple completion--)

Second producing formation Gantz Pay zone depth 2191-2195 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

DEC 30 1985

GORDON PAY ZONE DEPTH 2454' - 2459'

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

PERFORATION:

4' 4 holes 2076'-2080' } Berea  
 8' 8 holes 2090'-2098' }  
 4' 4 holes 2191'-2195' } Gantz  
 4' 4 holes 2454'-2458' }  
 5' 5 holes 2464'-2469' } Gordon

HSC .39 goex.  
 FRAC: Breakdown 1200 psi  
 3 pump trucks  
 4 1/2" casing  
 treat psi 2111  
 rate bbl per min 43  
 total fluid 58,330  
 total sand 115 sacks 20/40

Cla Chek  
 NE 50  
 4500 lbs KCL  
 NDL - 100  
 Dura Surf  
 Unislik  
 Pen Surf  
 Cla Chek  
**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 and Sand			0'	800'	
First Salt Sand			985'	1015'	
Second Salt Sand			1154'	1241'	
Third Salt Sand			1324'	1338'	
Maxton			1433'	1466'	
Big Injun-Squaw			1525'	1763'	
Weir			1822'	1844'	
Welsh Stray			2015'	2017'	
Berea			2075'	2097'	
DEVONIAN SHALE			2097'		
Gantz			2191'	2195'	
Thirty Foot			2306'	2340'	
Gordon			2442'	2470'	
Speechly/Balltown			3508'	3532'	
Total Depth				3826'	

Went nearby log  
 Up Dev unconf. 2097 1250  
 Huron 3347

Huron @ TD.

(Attach separate sheets as necessary)

Cuyahoga Exploration  
 Well Operator  
 By: *[Signature]*  
 Date: \_\_\_\_\_

Note: Regulation 2.02(3)

RECEIVED

MAR 1 1987



1) Date: February 26, 19 85  
2) Operator's Well No. Harness #5  
3) API Well No. 47 - 107 - 1358  
State \_\_\_\_\_ County \_\_\_\_\_ Permit \_\_\_\_\_

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

OIL & GAS DIVISION  
DEPT. OF MINES

- 4) WELL TYPE: A Oil  / Gas   
B (If "Gas", Production  / Underground storage \_\_\_\_\_ / Deep \_\_\_\_\_ / Shallow )
- 5) LOCATION: Elevation: 719 Watershed: Bull Creek  
District: Union County: Wood Quadrangle: Willow Island
- 6) WELL OPERATOR Cuyahoga Exp. & Dev. Corp. 7) DESIGNATED AGENT Roger Hunter  
Address Route 1 Address P. O. Box 1386  
Marietta, OH 45750 Charleston, WV 25325
- 8) OIL & GAS INSPECTOR TO BE NOTIFIED 9) DRILLING CONTRACTOR:  
Name Mike Underwood Name not yet determined  
Address Route 2, Box 135 Address \_\_\_\_\_  
Salem, WV 26426
- 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, Devonian Shale/Benson Formation
- 12) Estimated depth of completed well, 5,000 feet
- 13) Approximate trata depths: Fresh, 100 feet; salt, 1,500 feet.
- 14) Approximate coal seam depths: not applicable Is coal being mined in the area? Yes \_\_\_\_\_ / No

15) CASING AND TUBING PROGRAM

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		38.0	X		60'	60'		Kinds
Fresh water	9 5/8		36.0	X		200'	200'	<u>CTS NEAT</u>	
Coal									Sizes
Intermediate	7		20.0	X		2500'	2500'	300 sacks	
Production	4.5		10.5	X		5000'	5000'	300 sacks	Depths set
Tubing									
Liners									Perforations:
									Top Bottom

OFFICE USE ONLY  
DRILLING PERMIT

Permit number 47-107-1358 Date March 5, 19 85

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 5, 1987 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond:	Agent:	Plat:	Casing	Fee
<u>52</u>	<u>MD</u>	<u>MD</u>	<u>MD</u>	<u>1240</u>

Margaret J. Assie  
Administrator, Office of Oil and Gas