



NOTE: NO WELLS WITHIN 2500'

PREPARED BY MSES CONSULTANTS

FILE NO. MSES 84-302  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 500  
 MINIMUM DEGREE OF ACCURACY 1/1200  
 PROVEN SOURCE OF ELEVATION ROAD INT. 1350' NE OF LOC. EL. 647

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) John A. Bailey  
 R. P. E. \_\_\_\_\_ L. L. S. 652

PLACE SEAL HERE

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



Department of Mines  
 Oil & Gas Division

DATE FEBRUARY 8, 19 84  
 OPERATOR'S WELL NO. AM84-1  
 API WELL NO. 47-095-1047  
 STATE COUNTY PERMIT

WELL TYPE: OIL \_\_\_ GAS X LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
 (IF "GAS", PRODUCTION X STORAGE \_\_\_ DEEP \_\_\_ SHALLOW X)  
 LOCATION: ELEVATION 677.75' WATER SHED \_\_\_ OHIO RIVER \_\_\_  
 DISTRICT LINCOLN 3 COUNTY TYLER 091  
 QUADRANGLE PADEN CITY 528 New Martinsville 15' WC 4  
 SURFACE OWNER ADONIS FOREST PRODUCTS, INC. ACREAGE 13.33  
 OIL & GAS ROYALTY OWNER LOGAN HASSIG, AGENT LEASE ACREAGE 13.33  
 LEASE NO. \_\_\_\_\_  
 PROPOSED WORK: DRILL X CONVERT \_\_\_ DRILL DEEPER \_\_\_ REDRILL \_\_\_ FRACTURE OR STIMULATE X PLUG OFF OLD FORMATION \_\_\_ PERFORATE NEW FORMATION \_\_\_ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_  
 PLUG AND ABANDON \_\_\_ CLEAN OUT AND REPLUG \_\_\_  
 TARGET FORMATION 5TH SAND / GORDON ESTIMATED DEPTH 3750'  
 WELL OPERATOR APPLIED MECHANICS CORP. 053 DESIGNATED AGENT C.L. STOUT  
 ADDRESS RT. 1 BOX 41-J BRIDGEPORT, WV 26330 ADDRESS RT. 1 BOX 41-J BRIDGEPORT, W.V. 26330

MAR 19 1984

# RECEIVED

MAY 30 1984



IV-35  
(Rev 8-81)

OIL & GAS DIVISION  
DEPT. OF MINES of West Virginia  
Department of Mines  
Oil and Gas Division

Date April 6, 1984  
Operator's  
Well No. #1  
Farm AM-84  
API No. 47 - 095 - 1047

WELL OPERATOR'S REPORT  
OF  
DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

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

LOCATION: Elevation: 677.75' Watershed Ohio River  
District: Lincoln County Tyler Quadrangle Paden City

COMPANY Applied Mechanics Corporation  
ADDRESS Rt. 1, Box 41-J, Bridgeport, WV 26330  
DESIGNATED AGENT C.L. Stout  
ADDRESS Rt. 1, Box 41-J, Bridgeport, WV 26330  
SURFACE OWNER Adonis Forest Products, Inc.  
ADDRESS P. O. Box 35, New Martinsville, WV 26155  
MINERAL RIGHTS OWNER Logan Hassig, Agent  
ADDRESS P.O. Box 35, New Martinsville, WV 26155  
OIL AND GAS INSPECTOR FOR THIS WORK Robert A. Lowther  
General Delivery,  
ADDRESS Middlebourne, WV 26149  
PERMIT ISSUED March 14, 1984  
DRILLING COMMENCED March 21, 1984  
DRILLING COMPLETED March 25, 1984  
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.	20'	20'	
13-10"			
9 5/8			
8 5/8	758'	758'	195 sks
7			
5 1/2			
4 1/2	2646.55'	2646.55'	255 sks.
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION 5th Sand/Gordon Depth 3750' feet  
Depth of completed well 2748' feet Rotary XX / Cable Tools \_\_\_  
Water strata depth: Fresh 40' \* feet; Salt 921', 1553' feet  
Coal seam depths: None Is coal being mined in the area? No  
\* Fresh Water @ 120', 230', 996'

OPEN FLOW DATA

Producing formation Gordon Pay zone depth 2504-2543 feet  
Gas: Initial open flow show Mcf/d Oil: Initial open flow ----- Bbl/d  
Final open flow 205 Mcf/d Final open flow ----- Bbl/d  
Time of open flow between initial and final tests 48 hours  
Static rock pressure 950 psig (surface measurement) after 48 hours shut in  
(If applicable due to multiple completion--)  
Second producing formation Weir Pay zone depth 1923-2008 feet  
Gas: Initial open flow show Mcf/d Oil: Initial open flow ----- Bbl/d  
Final open flow co-mingled 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

(Continue on reverse side)

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

First Stage: Gordon; 2504-2543' w/ 10 holes, water frac with nitrogen assist; 32,000# 20/40 sand, 430 bbls. sand laden fluid

Second Stage: Weir; 1923-2008' w/14 holes, water frac with nitrogen assist; 48,000# 20/40 sand, 554 bbls. sand laden fluid

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
					Including indication of all fresh and salt water, coal, oil and gas
Surface			0	50	fresh water @ 40'
Sand, gravel, soft			50	70	
Shale, blue, med.			70	100	
Red Rock, red, soft			100	120	fresh water @ 120'
Shale, gray, med.			120	160	
Red rock, red, soft			160	185	
Shale, gray, med.			185	210	
Shale, blue, med.			210	220	
Red Rock, red, soft			220	230	
Shale, gray, med.			230	265	fresh water @ 230'
Sand, gray, hard			265	273	
Shale, gray, soft			273	340	
Sand, hard			340	363	
Shale, sand, gray, med.			363	406	
Shale, gray, soft			406	460	
Red rock, red, soft			460	547	
Shale, gray, soft			547	530	
Sandy shale, gray, med.			580	622	
Shale, blue, soft			622	665	
Sand, gray, med.			665	685	
Shale, gray, soft			685	795	
Sand, gray, hard			795	803	
Shale, gray, soft			803	818	
Sand, gray, hard			818	828	
Shale, blue, soft			828	860	
Shale, gray, soft			860	880	
Shale, sand, brown, med.			880	888	hole damp
Shale, gray, soft			888	897	
Sand, shale, brown, med.			897	996	salt water, went on soap @ 921'
Shale, gray, soft			996	1165	
Sand, shale, gray, hard			1165	1215	
Shale, gray, soft			1215	1239	
Sand, shale, white, hard			1239	1275	
Shale, gray, soft			1275	1335	
Sand, white, hard			1335	1366	
Shale, gray, soft			1366	1405	
Lime, gray, hard			1405	1525	
Injun Sand, gray, hard			1525	1640	salt water @ 1553'

-continued-

(Attach separate sheets as necessary)

APPLIED MECHANICS CORPORATION

Well Operator

By: Charles H. Hill, IT PRESIDENT

Date: April 6, 1984

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."

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	• Remarks
Sand, shale, gray, hard			1640	1840		
Shale, gray, soft			1840	1861		
Sand, shale, gray, hard			1861	1900		
Weir, sand, gray, hard			1900	1972		
Shale, sand, gray, med.			1972	2016		
Shale, gray, soft			2016	2108		
Shale, sand, gray, hard			2108	2400		
Sandy shale, gray, hard			2400	2507		
<u>Gordon</u> shale, gray, med.			2507	2590		Picked up little gas at <u>2520-25'</u>
Shale, gray, med.			2590	2620		
Shale, blue, med.			2620	2748		Total Depth
 <u>GEOPHYSICAL LOG TOPS</u>						
Big Lime			1420'			
Big Injun			1515'			
Weir			1886'			
<u>Gordon</u>			<u>2502'</u>			

Date April 6, 1984

APPROVED *[Signature]*  
 ITS PRESIDENT



1) Date: February 27, 19 84  
 2) Operator's Well No. AM84-1  
 3) API Well No. 47 - 095 - 1047  
 State County Permit

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

- 4) WELL TYPE: A Oil  / Gas  /  
 B (If "Gas", Production  / Underground storage  / Deep  / Shallow  /)
- 5) LOCATION: Elevation: 677.75 Watershed: Ohio River  
 District: Magnolia County: Tyler Quadrangle: Paden City 7.5'
- 6) WELL OPERATOR Applied Mechanics Corp.  
 Address Rt. 1, Box 41-J  
Bridgeport, WV 26330
- 7) DESIGNATED AGENT C. L. Stout  
 Address Rt. 1, Box 41-J  
Bridgeport, WV 26330
- 8) OIL & GAS INSPECTOR TO BE NOTIFIED  
 Name Robert A. Lowther  
 Address General Delivery  
Middlebourne, WV 26149
- 9) DRILLING CONTRACTOR:  
 Name Unknown  
 Address \_\_\_\_\_
- 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, 5th Sand/Gordon
- 12) Estimated depth of completed well, 3750 feet
- 13) Approximate strata depths: Fresh, -- feet; salt, -- feet.
- 14) Approximate coal seam depths: -- 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			
Conductor	11 3/4	H-40	42		X	20	20	Kinds
Fresh water								
Coal								Sizes
Intermediate	8 5/8	J-55	23	X		600	600	Circulate to surface NEAT 300 SK OK AS REQ. BY RULE 15.01
Production	4 1/2	J-55	10.5	X			3650	
Tubing								Perforations:
Liners								Top Bottom

OFFICE USE ONLY  
 DRILLING PERMIT

Permit number 47-095-1047 Date March 14, 19 84

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 14, 1986 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond: <u>BB</u>	Agent: <u>MH</u>	Plat: <u>MH</u>	Casing <u>MH</u>	Fee <u>122</u>
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Margaret J. Asse  
 Administrator, Office of Oil and Gas

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