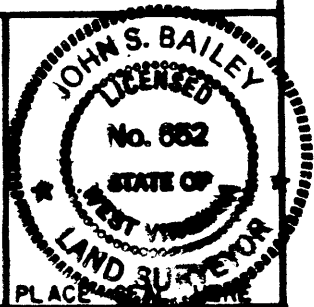


FILE NO. MSES 84-528
 DRAWN BY SARC
 SCALE 1" = 500'
 MINIMUM DEGREE OF
 ACCURACY 1 PART IN 200
 PROVEN SOURCE OF
 ELEVATION RD. JCT. 600' NE OF
 LOCATION; EL. 1189'

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 S. Bailey
 (R. P. E. _____ L. L. S. _____ 652)



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



DATE OCTOBER 11, 19 84
 OPERATOR'S WELL NO. A.M. 84-5
 API WELL NO. _____
47-095-1092-F
 STATE COUNTY PERMIT

Department of Mines
 OH & Gas Division

WELL TYPE: OIL _____ GAS X LIQUID INJECTION _____ WASTE DISPOSAL _____
 (IF "GAS", PRODUCTION X STORAGE _____ DEEP _____ SHALLOW X)

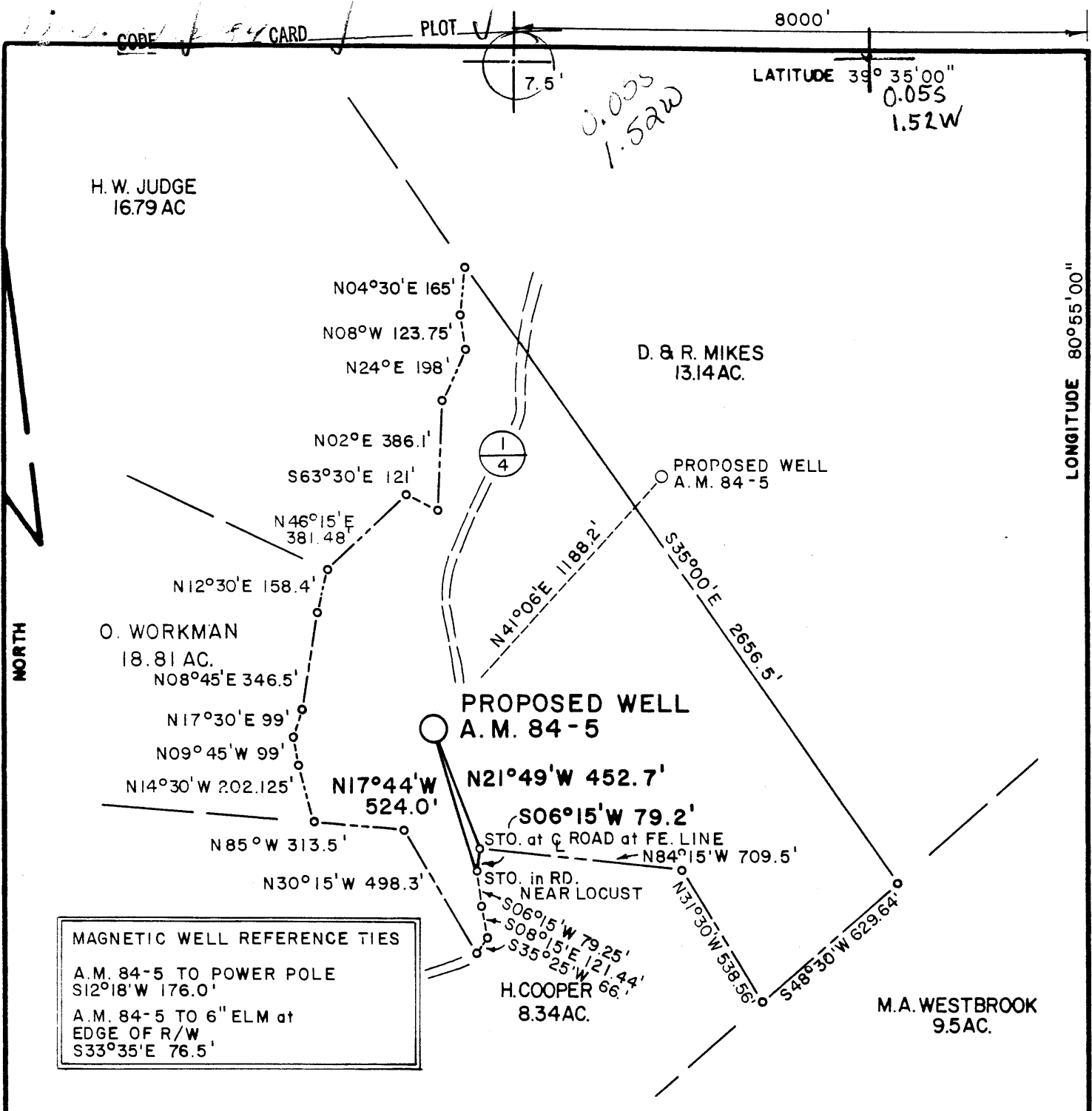
LOCATION: ELEVATION 1249.8' WATER SHED BUCK RUN & OWL RUN
 DISTRICT LINCOLN COUNTY TYLER
 QUADRANGLE PADEN CITY, W.VA. - OHIO 7.5' 1960 (1972 & 1976)

SURFACE OWNER DORA & RALPH MIKE ACREAGE 59.16
 OIL & GAS ROYALTY OWNER DORA & RALPH MIKE LEASE ACREAGE 59.16
 LEASE NO. _____

PROPOSED WORK: DRILL X CONVERT _____ DRILL DEEPER _____ REDRILL _____ FRACTURE OR
 STIMULATE _____ PLUS OFF OLD FORMATION _____ PERFORATE NEW
 FORMATION _____ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____

PLUG AND ABANDON _____ CLEAN OUT AND REPLUG _____ ESTIMATED DEPTH 4350'
 TARGET FORMATION FIFTH SAND/GORDON

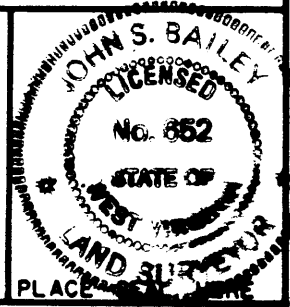
WELL OPERATOR APPLIED MECHANICS CORP. DESIGNATED AGENT C. L. STOUT
 ADDRESS RT. 1, BOX 41-J BRIDGEPORT, WV 26330 ADDRESS RT. 1, BOX 41-J BRIDGEPORT, WV 26330



MAGNETIC WELL REFERENCE TIES
 A.M. 84-5 TO POWER POLE
 S12°18'W 176.0'
 A.M. 84-5 TO 6" ELM at
 EDGE OF R/W
 S33°35'E 76.5'

FILE NO. MSES 84-526
 DRAWN BY SARC
 SCALE 1" = 500'
 MINIMUM DEGREE OF ACCURACY 1 PART IN 200
 PROVEN SOURCE OF ELEVATION RD. JCT. 600' NE OF LOCATION; EL. 1189'

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 S. Bailey
 (R.P.E. _____ L.L.S. 652)



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



Department of Mines
 Oil & Gas Division

DATE OCTOBER 11, 19 84
 OPERATOR'S WELL NO. A.M. 84-5
 API WELL NO. 47-095-1092
 STATE WEST VIRGINIA COUNTY TYLER PERMIT

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
 (IF "GAS", PRODUCTION STORAGE DEEP SHALLOW
 LOCATION: ELEVATION 1249.8' WATER SHED BUCK RUN & OWL RUN
 DISTRICT LINCOLN 3 528 COUNTY TYLER
 QUADRANGLE PADEN CITY, W.VA. - OHIO 7.5' 1960 (1972 & 1976) New Martinsville 15'SW, 091
 SURFACE OWNER DORA & RALPH MIKE ACREAGE 59.16
 OIL & GAS ROYALTY OWNER DORA & RALPH MIKE LEASE ACREAGE 59.16
 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 FIFTH SAND/GORDON ESTIMATED DEPTH 4350'
 WELL OPERATOR APPLIED MECHANICS CORP. DESIGNATED AGENT C. L. STOUT
 ADDRESS RT. 1, BOX 41-J BRIDGEPORT, WV 26330 ADDRESS RT. 1, BOX 41-J BRIDGEPORT, WV 26330

OCT 29 1984

IV-35
(Rev 8-81)

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AUG 26 1985



State of West Virginia
Department of Mines
Oil and Gas Division

Date August 23, 1985
Operator's
Well No. AM84-5
Farm _____ Mikes _____
API No. 47 - 095 - 1092 F

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

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 ___ / Underground Storage ___ / Deep ___ / Shallow X /)

LOCATION: Elevation: 1249 Watershed Buck Run & Owl Run
District: Lincoln County Tyler Quadrangle Paden City 7.5

COMPANY Applied Mechanics Corporation
ADDRESS Rt. 1, Box 41-J; Bridgeport, W.Va. 26330

DESIGNATED AGENT Charles L. Stout
ADDRESS same as above

SURFACE OWNER Ralph & Dora Mikes
ADDRESS _____

MINERAL RIGHTS OWNER Ralph & Dora Mikes
ADDRESS _____

OIL AND GAS INSPECTOR FOR THIS WORK _____
Robert Lowther ADDRESS Middlebourne, W.Va.

PERMIT ISSUED October 11, 1984 5/31/85

DRILLING COMMENCED October 15, 1984

DRILLING COMPLETED October 18, 1984 6/7/85 - FMC

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 <u>11 3/4</u> 20 3/8 Cond.	<u>40</u>	<u>0</u>	
20 3/8 20 3/8			
<u>9 5/8</u>			
<u>8 5/8</u>	<u>1440</u>	<u>1440</u>	<u>355 sacks</u>
<u>7</u>			
<u>5 1/2</u>			
<u>4 1/2</u>	<u>3144</u>	<u>3144</u>	<u>295 sacks</u>
<u>3</u>			
<u>2</u>			
Liners used			

GEOLOGICAL TARGET FORMATION Gordon Depth 3012-3047 feet
Depth of completed well 3198 feet Rotary X / Cable Tools _____
108-170
Water strata depth: Fresh 187&210 feet; Salt 0 feet
Coal seam depths: 0 Is coal being mined in the area? No

OPEN FLOW DATA

Producing formation Gordon Pay zone depth 3012-3047 feet
Gas: Initial open flow show Mcf/d Oil: Initial open flow 0 Bbl/d
Final open flow (309) Mcf/d Final open flow 0 Bbl/d
Time of open flow between initial and final tests 5 hours

Static rock pressure 1210 psig (surface measurement) after 48 hours shut in
(If applicable due to multiple completion--)

Second producing formation Big Injun Pay zone depth 2030-2040 feet
Gas: Initial open flow _____ Mcf/d Oil: Initial open flow -0- Bbl/d
Final open flow (5) Mcf/d Oil: Final open flow -0- Bbl/d
Time of open flow between initial and final tests -0- hours

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

new zone completed dryul gas show

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

Perforated---3018-3020---3 holes
 3030-3038---9 holes
 Fractured----752 bbls H₂O
 500 gallons acid
 40,000# 20-40 sand
 121,000 S.C.F. N₂

Restimulate on 6/7/85:

Perforated 2030-2040---10 holes--3/8"
 Acidized with 250 gal 15% HCl

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
					Including indication of all fresh water, salt water, coal, oil and gas
Topsoil					
Sand & clay	red	soft	0	60	Fresh water: 158'
Sand	gray	soft	60	104	170'
Shale	red & gray	soft	104	637	187'
Lime	lt. brown	hard	637	645	210'
Shale lime	dk. gray	soft	645	1154	
Sand	white	hard	1154	1208	
Sand shale	gray	gray	1208	1378	
Sand	white	hard	1378	1610	
Sand shale	lt. gray	soft	1610	1882	Electric log 1882 to T.D.
Sand	white	hard	1882	1940	
(Maxton)					
Shale	gray	soft	1940	1966	
Lime	dk. gray	hard	1966	2022	
(Big Injun)					
Sand	lt. gray	m. hard	2022	2185	
(Big Injun)					
Sand shale	gray	soft	2185	2432	
Sand	dk. gray	soft	2432	2526	
(Weir)					
Shale sand	gray	soft	2526	3014	
Sand	gray	m. hard	3014	3059	
(Gordon)					
Shale	gray	Soft	3059	3200	T.D.

(Attach separate sheets as necessary)

Applied Mechanics Corporation

Well Operator

By:

Charles L. Stout, Pres

Date:

August 23, 1985

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 well."



IV-35
(Rev 8-81)

Date November 4, 1984
Operator's
Well No. AM 84-5
Farm Ralph & Dora Mikes
API No. 47 - 095 - 1092

State of West Virginia
Department of Mines
Oil and Gas Division

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 / Underground Storage / Deep / Shallow X /)

LOCATION: Elevation: 1249 Watershed Buck Run & Owl Run
District: Lincoln County Tyler Quadrangle Paden City 7.5

COMPANY Applied Mechanics Corporation 0053
ADDRESS Rt. 1, Box 41-J; Bridgeport, W.Va. 26330

DESIGNATED AGENT Charles L. Stout
ADDRESS same as above

SURFACE OWNER Ralph & Dora Mikes
ADDRESS

MINERAL RIGHTS OWNER Ralph & Dora Mikes
ADDRESS

OIL AND GAS INSPECTOR FOR THIS WORK
Robert Lowther ADDRESS Middlebourne, W.Va.

PERMIT ISSUED October 11, 1984

DRILLING COMMENCED October 15, 1984

DRILLING COMPLETED October 18, 1984

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 <u>11 3/4</u> 20 1/2 Cond.	<u>40</u>	<u>0</u>	
9 5/8			
<u>9 5/8</u>			
<u>8 5/8</u>	<u>1440</u>	<u>1440</u>	<u>355 sacks</u>
<u>7</u>			
<u>5 1/2</u>			
<u>4 1/2</u>	<u>3144</u>	<u>3144</u>	<u>295 sacks</u>
<u>3</u>			
<u>2</u>			
Liners used			

GEOLOGICAL TARGET FORMATION Gordon Depth 3012-3047 feet

Depth of completed well 3198 feet Rotary X / Cable Tools

Water strata depth: Fresh 187&210 feet; Salt 0 feet

Coal seam depths: 0 Is coal being mined in the area? No

OPEN FLOW DATA

Producing formation Gordon Pay zone depth 3012-3047 feet

Gas: Initial open flow show Mcf/d Oil: Initial open flow 0 Bbl/d

Final open flow 309 Mcf/d Final open flow 0 Bbl/d

Time of open flow between initial and final tests 5 hours

Static rock pressure 1210 psig (surface measurement) after 48 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

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

Perforated---{3018-3020---3 holes
 Gordon {3030-3038---9 holes

Fractured----752 bbls H₂O
 500 gallons acid
 40,000# 20-40 sand
 121,000 S.C.F. N₂

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
					Including indication of all f: and salt water, coal, oil and
Topsoil					
Sand & clay	red	soft	0	60	Fresh water: 158'
Sand	gray	soft	60	104	170'
Shale	red & gray	soft	104	637	187'
Lime	lt. brown	hard	637	645	210'
Shale lime	dk. gray	soft	645	1154	
Sand	white	hard	1154	1208	
Sand shale	gray	gray	1208	1378	
Sand	white	hard	1378	1610	
Sand shale	lt. gray	soft	1610	1882	Electric log 1882 to T.D.
Sand (Maxton)	white	hard	1882	1940	
Shale	gray	soft	1940	1966	
Lime (Big Injun)	dk. gray	hard	1966	2022	
Sand (Big Injun)	lt. gray	m. hard	2022	2185	
Sand shale	gray	soft	2185	2432	
Sand (Weir)	dk. gray	soft	2432	2526	
Shale sand	gray	soft	2526	3014	
Sand (Gordon)	gray	m. hard	3014	3059	
Shale	gray	Soft	3059	3200	T.D.

(Attach separate sheets as necessary)

Applied Mechanics Corporation

Well Operator

By: *Charles L. Stout*

Date: November 4, 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

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OCT 12 1984



1) Date: October 11, 19 84
2) Operator's Well No. AM84-5
3) API Well No. 47 - 095 - 1092
State County Permit

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

- 4) WELL TYPE: A Oil / Gas /
B (If "Gas", Production / Underground storage / Deep / Shallow)
- 5) LOCATION: Elevation: 1249.80 Watershed: Buck Run OWL RUN (0.68)
District: Lincoln County: Tyler Quadrangle: Paden City 7.5'
- 6) WELL OPERATOR Applied Mechanics Corporation 7) DESIGNATED AGENT C. L. Stout
Address Rt. 1, Box 41-J Address Route 1, Box 41-J
Bridgeport, WV 26330 Bridgeport, WV 26330
- 8) OIL & GAS INSPECTOR TO BE NOTIFIED 9) DRILLING CONTRACTOR:
Name Robert A. Lowther Name Unknown
Address General Delivery Address _____
Middlebourne, WV
- 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, Fifth Sand/Gordon
12) Estimated depth of completed well, 4350 feet
13) Approximate trata 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	For drilling		
Conductor	11-3/4	H-40	42		X	20	20	Kinds
Fresh water								
Coal								Sizes
Intermediate	8-5/8	J-55	23	X		1150	1150	Circulate to surface NEAT 300 SK or as required by rule 0.15.01
Production	4-1/2	J-55	10.5	X			4250	
Tubing								Perforations:
Liners								Top Bottom

OFFICE USE ONLY
DRILLING PERMIT

Permit number 47-095-1092 Date October 12, 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 October 12, 1986 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond: <u>8</u>	Agent: <input checked="" type="checkbox"/> <u>MW</u>	Plat: <u>MW</u>	Casing: <u>MW</u>	Fee: <u>337</u>
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Margaret J. Reese
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

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MAY 31 1985



1) Date: May 30, 19 85
 2) Operator's Well No. AM 84-5
 3) API Well No. 47-095-1092 F
 State _____ County _____ Permit _____

**OIL & GAS DIV.
DEPT. OF MINES**

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

- 4) WELL TYPE: A Oil _____ / Gas X /
 B (If "Gas", Production _____ / Underground storage _____ / Deep _____ / Shallow X)
 5) LOCATION: Elevation: 1249 / Watershed: Buck Run & Owl Run
 District: Lincoln / County: Tyler / Quadrangle: Paden City 7.5
 6) WELL OPERATOR Applied Mechanics Corp. / 7) DESIGNATED AGENT Charles L. Stout
 Address Rt. 1, Box 41-J / Address Rt. 1, Box 41-J
Bridgeport, WV 26330 / Bridgeport, WV 26330
 8) OIL & GAS INSPECTOR TO BE NOTIFIED / 9) DRILLING CONTRACTOR:
 Name Robert Lowther / Name _____
 Address Middlebourne, WV 26149 / Address _____
 10) PROPOSED WELL WORK: Drill _____ / Drill deeper _____ / Redrill _____ / Stimulate X /
 Plug off old formation _____ / Perforate new formation X /
 Other physical change in well (specify) _____
 11) GEOLOGICAL TARGET FORMATION, Injun
 12) Estimated depth of completed well, 3198 feet
 13) Approximate trata depths: Fresh, 158,170,187,210 feet; salt, 0 feet.
 14) Approximate coal seam depths: _____ Is coal being mined in the area? Yes _____ / No X

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	11.75			X		40	0		} EXISTING
Fresh water	8.625		23	X		1440	1440	355 Sacks	
Coal									
Intermediate									
Production	4.5		10.5	X		3144	3144	295 Sacks	Depths set
Tubing									
Liners									Perforations: Top _____ Bottom _____

**OFFICE USE ONLY
DRILLING PERMIT**

Permit number 47-095-1092 F Date May 31 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 May 31, 1987 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond:	Agent:	Plat:	Casing	Fee
<u>8</u>	<u>MH</u>	<u>MH</u>	<u>MH</u>	<u>567</u>

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.