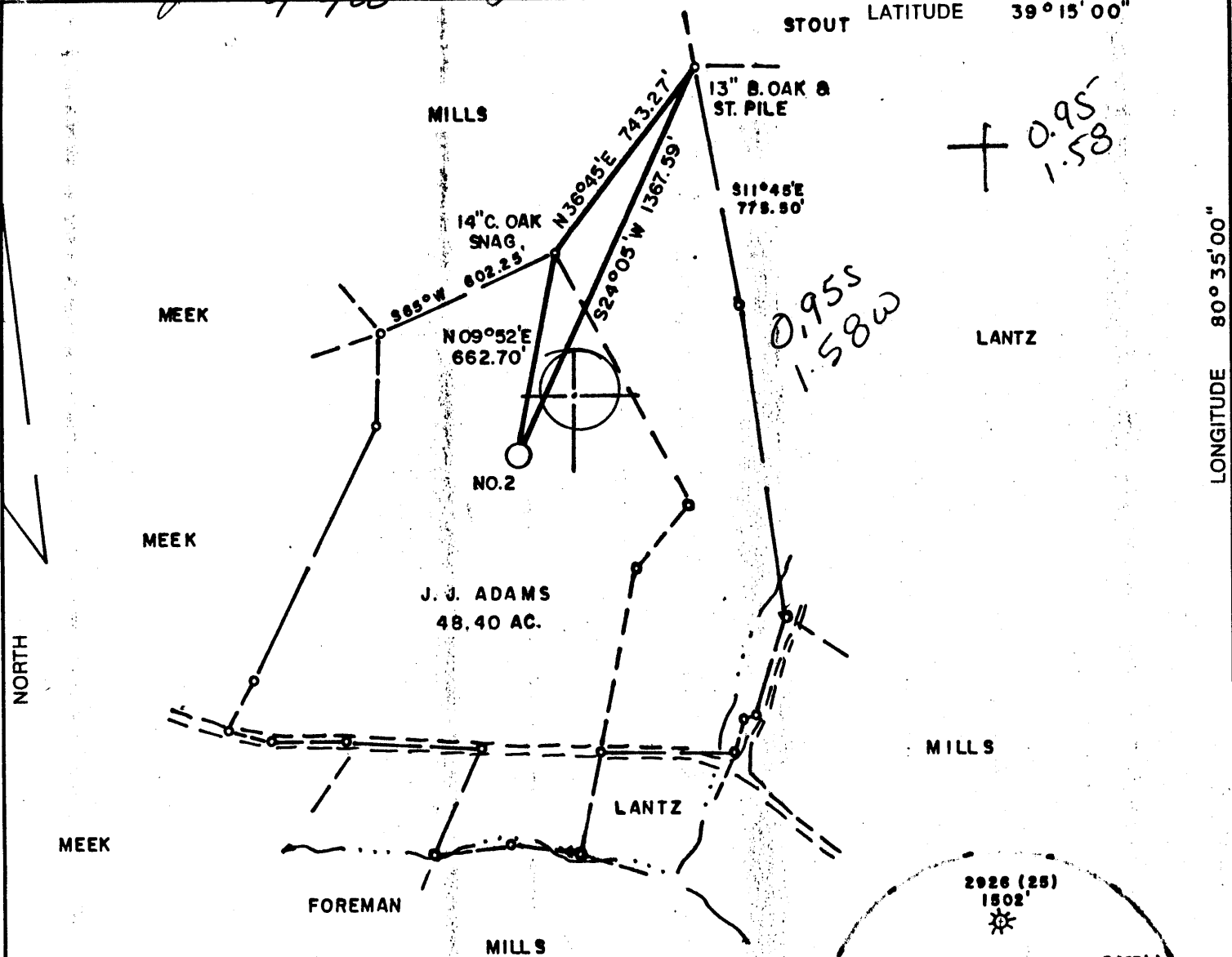


Janie 8/23/88

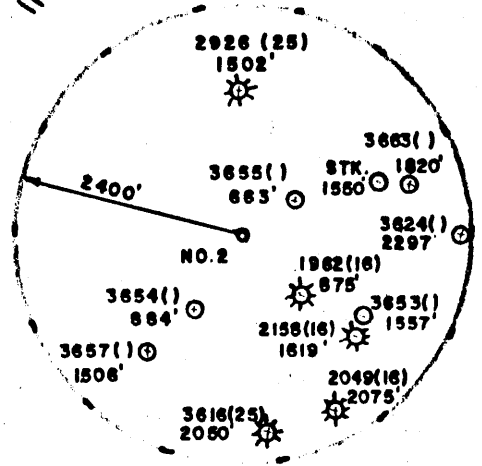
8440' STOUT LATITUDE 39°15'00"



LONGITUDE 80°35'00"

WELL REFERENCES:
 N03°E, 152' TO 12" POPLAR
 S33°30'W, 147' TO 6" BEECH

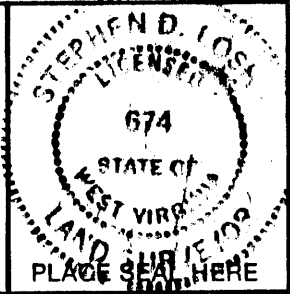
LAND SURVEYING SERVICES
 21 CEDAR LANE
 BRIDGEPORT, WV 26330
 PHONE : 304-842-2018



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

FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 500'
 MINIMUM DEGREE OF ACCURACY 1 in 200
 PROVEN SOURCE OF ELEVATION TOP OF KNOB 550' N.W. OF LOCATION ELEV. 1328'

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 ENERGY.
 (SIGNED) *Stephen D. Losh*
 R.P.E. _____ L.L.S. 674
 STEPHEN D. LOSH



STATE OF WEST VIRGINIA
 DEPARTMENT OF ENERGY
 OIL AND GAS DIVISION



DATE AUGUST 10, 19 88
 OPERATOR'S WELL NO. E-56
 API WELL NO. ADAMS NO. 2
 47 - 017 - 3669
 STATE COUNTY PERMIT

WELL TYPE: OIL ___ GAS LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS,") PRODUCTION STORAGE ___ DEEP ___ SHALLOW
 LOCATION: ELEVATION 1118' WATER SHED BUCKEYE CREEK
 DISTRICT GREENBRIER 4 COUNTY DODDRIDGE
 QUADRANGLE BIG ISAAC 7.5 mln. 252 123 2 VADIS NC
 SURFACE OWNER GLENN BUNTEN ACREAGE 33
 OIL & GAS ROYALTY OWNER J. J. ADAMS LEASE ACREAGE 48.40
 LEASE NO. _____

COUNTY NAME

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

PERMIT

PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___
 TARGET FORMATION ALEXANDER ESTIMATED DEPTH 5800'
 OPERATOR EXCEL ENERGY, INC. DESIGNATED AGENT HARRY BARNETT
 ADDRESS P.O. BOX 1020 ADDRESS P.O. BOX 1020
 BRIDGEPORT, WV 26330 1028 BRIDGEPORT, WV 26330

SEP 09 1988

6-16-21111 (145)



IV-35
(Rev 8-81)

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OCT 26 1988

State of West Virginia
Department of Mines
Oil and Gas Division

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

Date 10/24/88
Operator's
Well No. ADAMS #2 E-56
Farm J. Adams
API No. 047 - 017 - 3669

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

LOCATION: Elevation: 1118' Watershed BUCKEYE CREEK
District: GREENBRIER County DODDRIDGE Quadrangle BIG ISAAC

COMPANY EXCEL ENERGY, INC.
ADDRESS P.O. BOX 1020, BRIDGEPORT, WV 26330
DESIGNATED AGENT H.L. BARNETT
ADDRESS P.O. BOX 1020, BRIDGEPORT, WV 26330
SURFACE OWNER GLENN BUNTEN HEIRS
ADDRESS 132 EADE AVE., GLENSHAW, PA 15116
MINERAL RIGHTS OWNER J.J. ADAMS, ET.AL.
ADDRESS UNKNOWN

OIL AND GAS INSPECTOR FOR THIS WORK
MIKE UNDERWOOD ADDRESS RT. 2, BOX 114, SALEM, WV
26426
PERMIT ISSUED 09/09/88
DRILLING COMMENCED 10/04/88
DRILLING COMPLETED 10/11/88

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.	20'	20'	sanded in
13-10"			
9 5/8			
8 5/8	1227'	1227'	C.T.S.
7			
5 1/2			
4 1/2	5569'	5569'	500 sks
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION ALEXANDER, BENSON Depth 5700 feet
Depth of completed well 5559 feet Rotary X / Cable Tools _____
Water strata depth: Fresh 96 feet; Salt 1610 feet
Coal seam depths: N/A Is coal being mined in the area? NO

OPEN FLOW DATA

Producing formation ALEXANDER Pay zone depth 5273 - 5475 feet
Gas: Initial open flow SHOW Mcf/d Oil: Initial open flow --- Bbl/d
Final open flow 474 Mcf/d Final open flow --- Bbl/d
Time of open flow between initial and final tests _____ hours
Static rock pressure 1700 psig (surface measurement) after 72 hours shut in
(If applicable due to multiple completion--)

Second producing formation BENSON Pay zone depth 5108 - 5120 feet
Gas: Initial open flow SHOW Mcf/d Oil: Initial open flow --- Bbl/d
Final open flow 474 Mcf/d Oil: Final open flow --- Bbl/d
Time of open flow between initial and final tests _____ hours
Static rock pressure 1700 psig (surface measurement) after 72 hours shut in

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(Continue on reverse side)

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

STAGE I ^{Leopold?} (5273'-5475') 12 holes, 330 sks sand, 500 gal 15% HCL, 170 BBL 75Q Foam.
 STAGE II ^{Co} (5112'-5119') 13 holes, 330 sks sand, 500 gal 15% HCL, 170 BBL 75Q Foam.
 STAGE III (4583'-5001') 10 holes, 180 sks sand, 500 gal 15% HCL, 110 BBL 75Q Foam.
 Road → Riley

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			0	40	
Sand			40	70	
Sand & Shale (Red Rock)			70	462	
Shale			462	640	
Sand & Shale (Red Rock)			640	1341	
Sand			1341	1415	
Shale			1415	1605	
Sand			1605	1618	1" Stream H ₂ O @ 1610'
Sand & Shale			1618	1920	
Sand			1920	1973	
Shale			1973	2104	
L. Lime			2104	2120	
Shale			2120	2150	
Big Lime			2150	2210	
Big Injun			2210	2289	
Shale			2289	2900	
Gordon			2900	2950	Show of Gas
Shale & Sand			2950	5110	
Benson			5110	5130	
Shale			5130	5440	
Alexander			5440	5490	
Shale			5490		
				5638 DTD	
				5632 LTD	

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DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

(Attach separate sheets as necessary)

EXCEL ENERGY, ICN.

Well Operator

By: Bradley Thomas, Consultant

Date: October 24, 1988

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."
 2578

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017-3669
Issued 9/9/88 Expires 9/9/90
Page _____ of _____

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS
WELL WORK PERMIT APPLICATION

- 1) Well Operator: EXCEL ENERGY, INC. 16570, 4, 252
- 2) Operator's Well Number: Adams E-56 3) Elevation: 986
- 4) Well type: (a) Oil / or Gas /
(b) If Gas: Production / Underground Storage /
Deep / Shallow /
- 5) Proposed Target Formation(s): Benson - Alexander
- 6) Proposed Total Depth: 5650 feet
- 7) Approximate fresh water strata depths: 70, 150 @ 718, 600'
- 8) Approximate salt water depths: N/A
- 9) Approximate coal seam depths: 70-73, 150-154, 640-643 possibly 876-880'
- 10) Does land contain coal seams tributary to active mine? Yes / No /
- 11) Proposed Well Work: Drill and Stimulate New Well
- 12)

CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT
	Size	Grade	Weight per ft.	For drilling	Left in well	Fill-up (cu. ft.)
Conductor	113/4			20	20	Sanded in
Fresh Water						380CSR18-11.3
Coal	85/8		23#	1050	1050	380CSR18-11.2
Intermediate						C.T.S.
Production	4 1/2		10.5#	5600	5600	380CSR18-11.1 450 sks
Tubing						
Liners						

PACKERS : Kind _____
 Sizes _____
 Depths set _____

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For Division of Oil and Gas Use Only DIVISION OF OIL & GAS
 DEPARTMENT OF ENERGY

Fee(s) paid: Well Work Permit Reclamation Fund WPCP

Plat WW-9 WW-2B Bond 50 Blanket Agent

(Type)

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Page 1 of _____
Form WW2-A
(09/87)
File Copy

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

Date: AUGUST 12, 1988
Operator's well number
E-56
API Well No: 47 - 017 - 3669
State - County - Permit

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

NOTICE AND APPLICATION FOR A WELL WORK PERMIT

4) Surface Owner(s) to be served:
(a) Name GLENN BUNTEN
Address 132 FADE AVENUE
GLENSHAW, PA. 15116
(b) Name _____
Address _____
(c) Name _____
Address _____
6) Inspector MIKE UNDERWOOD
Address RT. 2, BOX 114
SALEM, WV. 26426
Telephone (304)-782-1043

5) (a) Coal Operator:
Name _____
Address _____
(b) Coal Owner(s) with Declaration
Name WILLIS G. TETRICK, JR.
Address 10 UNION NATIONAL BANK BLDG.
CLARKSBURG, W.V. 26301
Name _____
Address _____
(c) Coal Lessee with Declaration
Name _____
Address _____

TO THE PERSON(S) NAMED ABOVE TAKE NOTICE THAT:

_____ Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil and gas OR
X Included is the information required by Chapter 22B, Article 1, Section 8(d) of the Code of West Virginia (see page 2)
I certify that as required under Chapter 22B of the West Virginia Code I have served copies of this notice and application, a location plat, and accompanying documents pages 1 through _____ on the above named parties, by:
_____ Personal Service (Affidavit attached)
X Certified Mail (Postmarked postal receipt attached)
_____ Publication (Notice of Publication attached)

I have read and understand Chapter 22B and 38 CSR 11-18, and I agree to the terms and conditions of any permit issued under this application.
I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete.
I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Well Operator EXCEL ENERGY, INC.
By: SARA AMAN SARA AMAN
Its: CORPORATE SECRETARY
Address P.O. BOX 1020
BRIDGEPORT, WV 26330
Telephone (304) 842-6927

Subscribed and sworn before me this 12th day of August, 1988
Rouis G. Jovan Notary Public
My commission expires 12/20/90