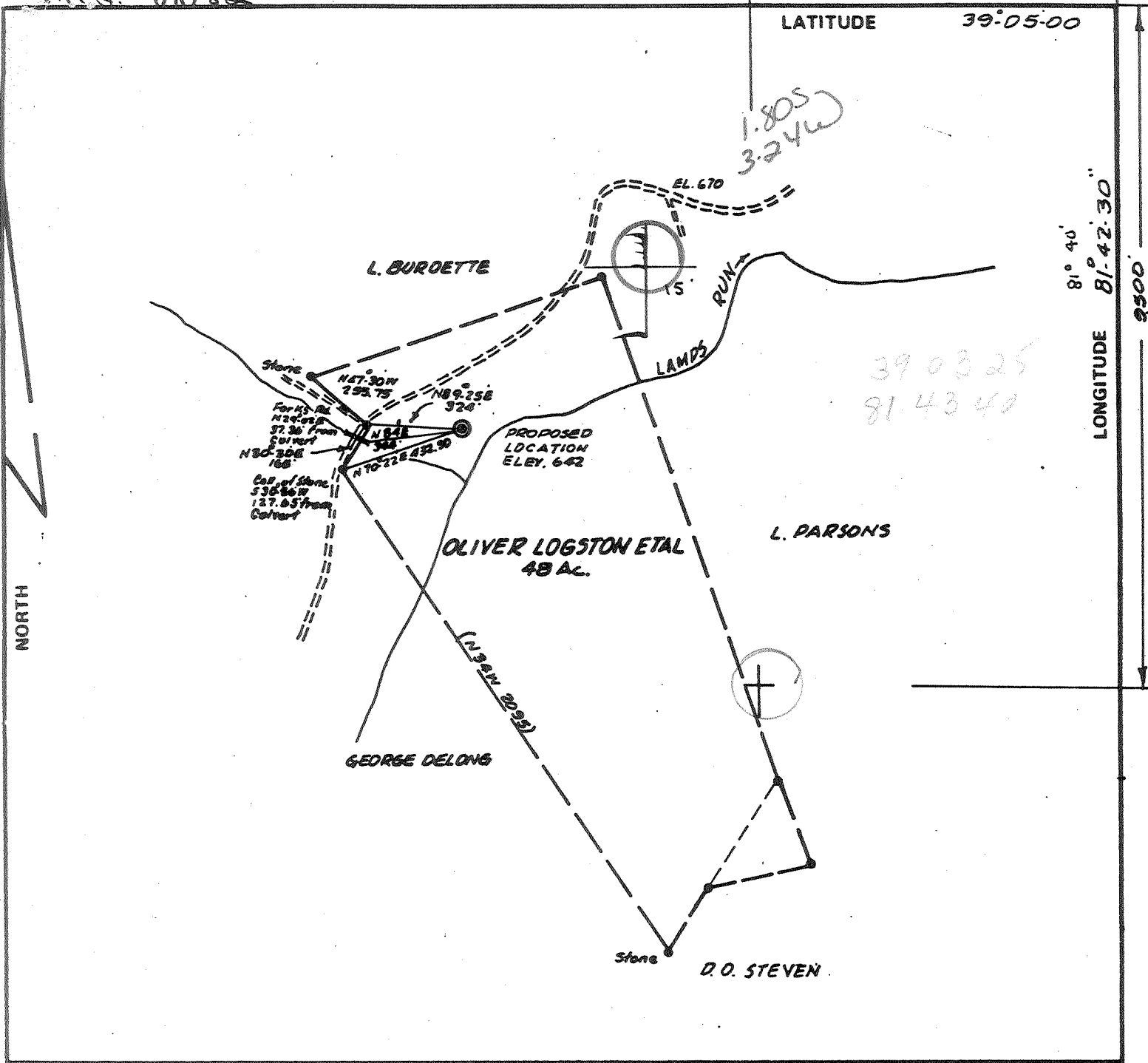


M.S. 4/6/82

5100

LATITUDE 39°05'00"

LONGITUDE 81°42'30"



39 03 25  
81 43 40

FILE NO. \_\_\_\_\_  
DRAWING NO. \_\_\_\_\_  
SCALE 1"=500  
MINIMUM DEGREE OF ACCURACY 1 IN 200  
PROVEN SOURCE OF ELEVATION Road Intersection Elev. 670

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) Frank H. Baskin  
R.P.E. \_\_\_\_\_ L.L.S. 209

PLACE SEAL HERE

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



DATE FEB 24, 19 82  
OPERATOR'S WELL NO. 1  
API WELL NO. 47-035-1620  
STATE COUNTY PERMIT

STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
OIL AND GAS DIVISION

WELL TYPE: OIL \_\_\_ GAS X LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
(IF "GAS,") PRODUCTION \_\_\_ STORAGE \_\_\_ DEEP \_\_\_ SHALLOW X  
LOCATION: ELEVATION 642 WATER SHED LAMPS RUN  
DISTRICT GRANT COUNTY JACKSON  
QUADRANGLE POND CREEK Bellville 1st SW  
SURFACE OWNER OLIVER LOGSTON ETAL ACREAGE 48  
OIL & GAS ROYALTY OWNER OLIVER LOGSTON ETAL LEASE ACREAGE 48  
LEASE NO. \_\_\_\_\_  
PROPOSED WORK: DRILL X 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 4500  
WELL OPERATOR ADRIEL'S OIL & GAS EXP & DEV. INC DESIGNATED AGENT \_\_\_\_\_  
ADDRESS P.O. BOX 1785 ADDRESS SAME  
CHARLESTON, WEST VIRGINIA 25326

APR 19 1982

RECEIVED

JUN - 2 1982



IV-35  
(Rev 8-81)

OIL AND GAS DIVISION  
WV DEPARTMENT OF MINES

Date May 24, 1982

Operator's  
Well No. LOGSTON NO.1

State of West Virginia

Department of Mines  
Oil and Gas Division

Farm Logston

API No. 47 - 035 - 1680

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: 642' Watershed Lamps Run  
District: Grant County Jackson Quadrangle Pond Creek

COMPANY H. D. Wells Oil & Gas Exploration

ADDRESS Box 1785, Charleston, WV

DESIGNATED AGENT H. D. Wells III

ADDRESS Box 1785, Charleston, WV

SURFACE OWNER Oliver Z. Logston et al

ADDRESS Massilon, Ohio

MINERAL RIGHTS OWNER same

ADDRESS \_\_\_\_\_

OIL AND GAS INSPECTOR FOR THIS WORK Richard

J. Morris ADDRESS Grantsville, WV

PERMIT ISSUED April 7, 1982

DRILLING COMMENCED April 19, 1982

DRILLING COMPLETED April 23, 1982

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.			
13-10"			
9 5/8	300'	300'	fill up
8 5/8			
7	1914'	1914'	50 sacks
5 1/2			
4 1/2	4175'	4175'	2000' fill up
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Devonian Shale Depth 4175' feet

Depth of completed well 4175' feet Rotary x / Cable Tools \_\_\_\_\_

Water strata depth: Fresh -12- feet; Salt -1200- feet

Coal seam depths: none Is coal being mined in the area? No

OPEN FLOW DATA

Producing formation Devonian Shale Pay zone depth 4100' feet

Gas: Initial open flow 120 Mcf/d Oil: Initial open flow -0- Bbl/d

Final open flow 150 Mcf/d Final open flow -0- Bbl/d

Time of open flow between initial and final tests 24 hours

Static rock pressure 750 psig (surface measurement) after 72 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.

23 Holes Perforated

2,058,000 Standard cubic feet of nitrogen

1,000 gallons of acid

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		s	0	45	
Sand		s	45	80	
Red Rock		s	80	95	
Slate		s	95	110	
Red Rock		s	110	150	
Sand		s	150	187	
Red Rock		s	187	210	
Slate & Shells		s	210	265	
Red Rock		s	265	305	
Slate & Shells		s	305	335	
Red Rock		s	335	350	
Shells		s	350	385	
Sand		s	385	443	
Slate		h	443	487	
Sand		s	487	535	
Slate		h	535	560	
Red Rock		s	560	590	
Slate		h	590	600	
Red Rock		s	600	650	
Slate & Shells		s	650	690	
Red Rock		s	690	770	
Slate		h	770	825	
Sand		s	825	838	
Slate		s	838	845	
Red Rock		s	845	860	
Slate		h	860	995	
Sand		s	995	1150	
Slate		h	1150	1275	
Sand		s	1275	1393	
Slate		h	1393	1587	
Sand		s	1587	1722	
Slate & Shells		h	1722	1986	
Berea Sand		s	1986	1988	* Gas Show
Devonian Shale		s	1988 thru	4175'	TOTAL DEPTH

(Attach separate sheets as necessary)

H. D. Wells Oil & Gas Exploration & Development  
Well Operator

By: *H. D. Wells*  
Date: May 24, 1982

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."



(12-81)

THIS IS AN ESTIMATE ONLY:  
ACTUAL INFORMATION MUST BE SUBMITTED ON FORM IV-35 UPON COMPLETION

DRILLING CONTRACTOR (IF KNOWN) Clint Hurt & Associates  
Address Tuppers Creek  
Charleston, WV

GEOLOGICAL TARGET FORMATION, Devonian Shale

Estimated depth of completed well, 4400' feet Rotary XXX / Cable tools        /

Approximate water strata depths: Fresh, -12- feet; salt, -1200- feet.

Approximate coal seam depths: none Is coal being mined in the area? Yes        / No XX /

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		Kind	Size
Conductor										
Fresh Water	9-5/8	J-55		X		300'	300'	fill up		<i>[Signature]</i>
Coal										
Intermediate	7	20#		X		1900'	1900'	50 sacks		
Production	4-1/2	J-55		X		4400'	4400'	2000' fill		Depths set
Tubing										
Liners										Perforations:
										Top Bottom

NOTE: Regulation 7.02 of the Department of Mines provides that the original and four copies of Form IV-2 must be filed with the Department, accompanied by (i) a plat in the form prescribed by Regulation 11, (ii) a bond in one of the forms prescribed by Regulation 12, or in lieu thereof the other security allowed by Code § 22-4-2, (iii) Form IV-9, "Reclamation Plan", applicable to the reclamation required by Code § 22-4-12b and Regulation 23, (iv) unless previously paid on the same well, the fee required by Code § 22-4-12a, and (v) if applicable, the consent required by Code § 22-4-8a from the owner of any water well or dwelling within 200 feet of the proposed well.

A separate Form IV-2 shall not be required for fracturing or stimulating a well where fracturing or stimulating is to be part of the work for which a permit is sought and is noted as such on the Form IV-2 filed in connection therewith.

THIS PERMIT MUST BE POSTED AT THE WELL SITE.  
ALL PROVISIONS BEING IN ACCORDANCE WITH CHAPTER 22,  
ARTICLE 4 OF THE W. VA. CODE, THE LOCATION IS HEREBY  
APPROVED FOR Drilling. THIS PERMIT SHALL EXPIRE  
IF OPERATIONS HAVE NOT COMMENCED BY 12-12-82  
BY *[Signature]*

The following waiver must be completed by the coal operator and by any coal owner or coal lessee who has recorded a declaration under Code 22-4-20, if the permit is to be issued within fifteen (15) days of receipt thereof.

WAIVER

The undersigned coal operator        / owner        / lessee        / of the coal under this well location has examined this proposed well location. If a mine map exists which covers the area of the well location, the well location has been added to the mine map. The undersigned has no objection to the work proposed to be done at this location, provided, the well operator has complied with all applicable requirements of the West Virginia Code and the governing regulations.

Date:       , 19       

By         
Its *[Signature]*