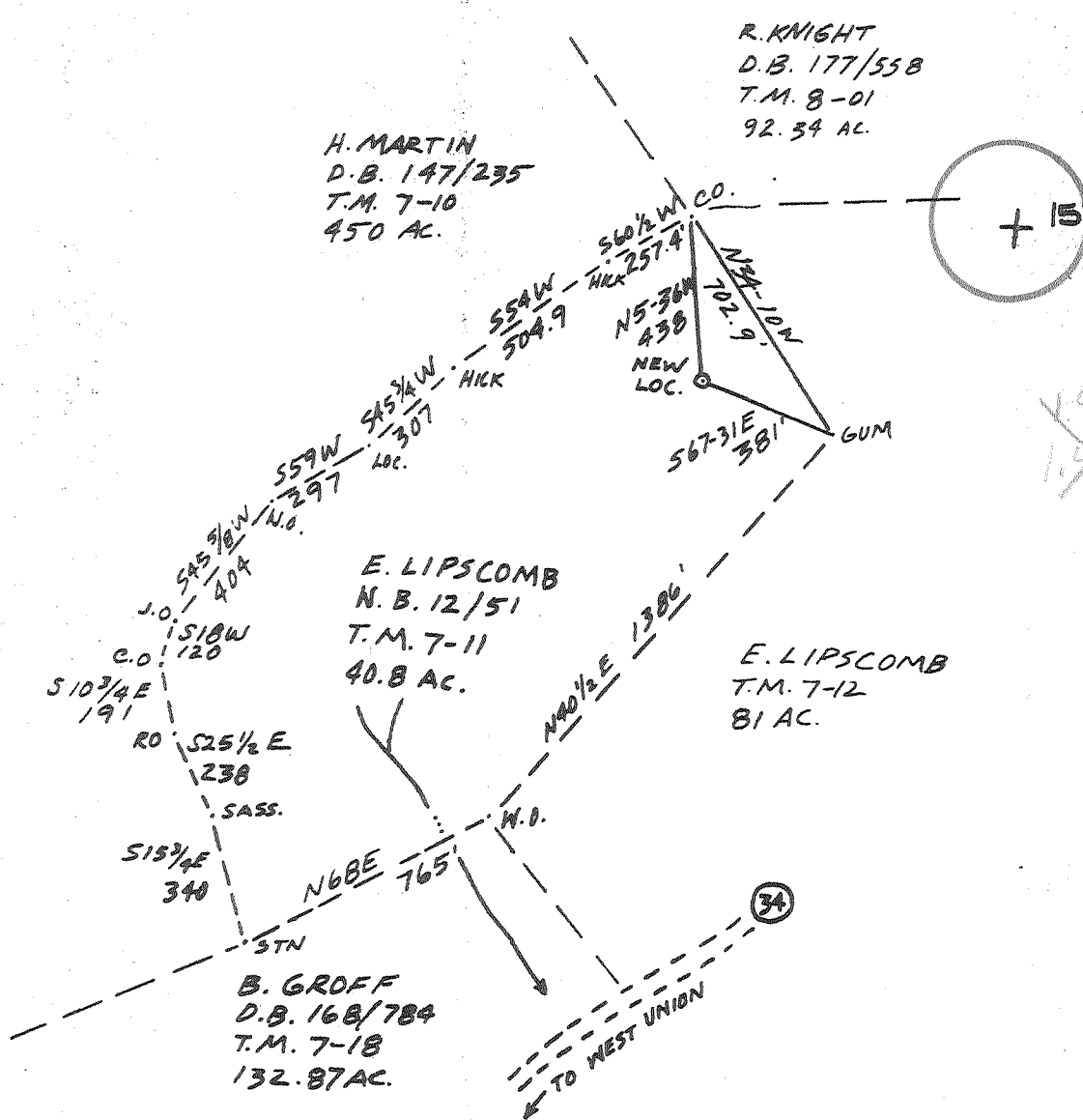


39° - 20'

80° - 45'

NORTH



FILE NO. K-501 Revised
 DRAWING NO. 2
 SCALE 1" = 500'
 MINIMUM CORNER OF ACCURACY 1/200
 PROVEN POINTS OF REFERENCE TOP OF KNIB (1319)

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: Neal Hughes
 P. R. E. 632



WARRANTY OF TITLE BY THE STATE OF WEST VIRGINIA
 TO THE SEVERAL OWNERS OF THE ABOVE DESCRIBED LANDS
 IN ACCORDANCE WITH THE ACTS OF THE LEGISLATURE
 PASSED MARCH 27, 1920 AND MARCH 27, 1921

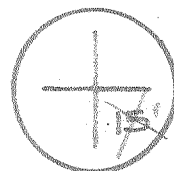
DATE SEPT. 13
 OPERATOR'S WELL NO. 47
 STATE WV

NO. 79
K-501-1
 Revised
2467-REV

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION

WELL TYPE OIL GAS LIQUID INJECTION WASTE DISPOSAL
 "GAS" PRODUCTION STORAGE
 LOCATION 1210 WATER WHEEL PIGGINS RUN
 DISTRICT WEST UNION COUNTY DODDRIDGE
 QUADRANGLE WEST UNION (7 1/2' SERIES) 15' SE
 SURFACE OWNER EMMA LIPSCOMB ACRES 40.8
 OIL & GAS ROYALTY OWNER CLAUDE PEARL SMITH; CHARLES LANFITT ACRES 40.8
 LEASE NO. K-501-1
 PROPOSED WORK DRILL CONVERT DRILL DEEPER STOP PLUG OFF
 STIMULATE PLUG OFF OLD WELL REPERFORATE NEW FORMATION OTHER PHYS.
 CLEAN OUT AND REPERFORATE
 TARGET FORMATION ALEXANDER ESTIMATED DEPTH 5600 OCT 9 1979
 WELL OPERATOR J&J ENTERPRISES, Inc. ESTIMATED AGENT HARRY BARNETT
 ADDRESS Box 48 ADDRESS Box 48
BUCKHANNON, WV 26201 BUCKHANNON, WV 26201
6-6 CENTRAL STATION 91

LATITUDE 39°-20'



LONGITUDE 80°-45'

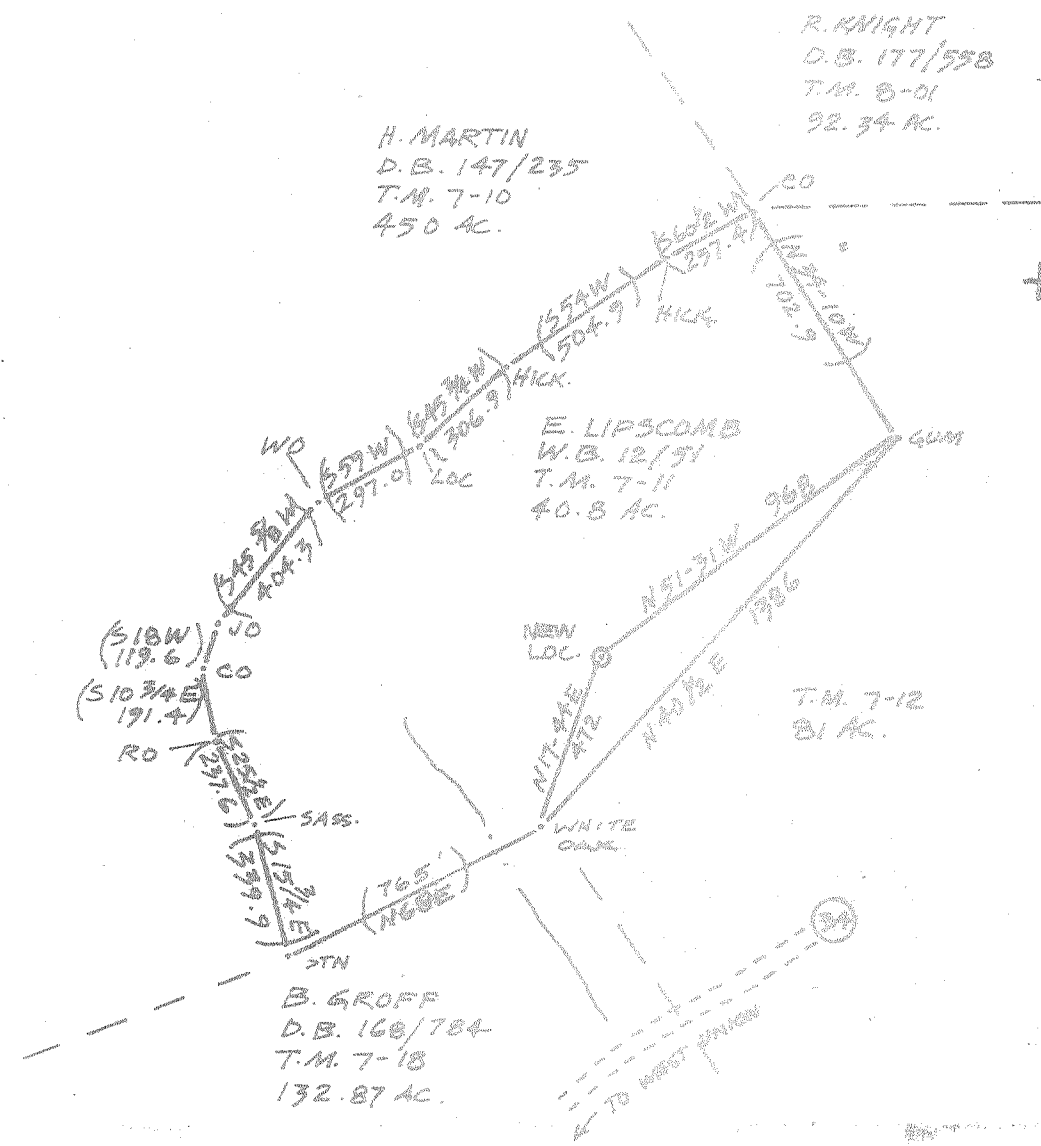
H. MARTIN
D.B. 147/235
T.M. 7-10
450 AC.

R. KNIGHT
D.B. 177/598
T.M. 8-01
92.34 AC.

E. LIPSCOMB
W.B. 12/51
T.M. 7-11
40.8 AC.

T.M. 7-12
81 AC.

B. GROFF
D.B. 166/784
T.M. 7-13
132.87 AC.



CALLS IN () ARE UNSURVEYED.

FILE NO. K-501

DRAWING NO. 1

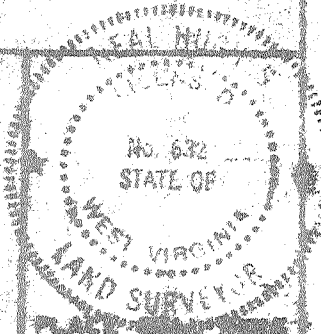
SCALE 1"=500'

MINIMUM DEGREE OF ACCURACY 1/200

PROVEN SOURCE OF ELEVATION TOP OF KNOS (1314)

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]

R.P.E. [Signature] L.L.S. 632



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

FORM IV-8 (8-78)



DATE 10 21
OPERATOR'S WELL NO. K-501
API WELL NO. 47-017-2467
STATE COUNTY PERMIT

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

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

LOCATION: ELEVATION 1018 WATER SHED PIGGIN RUN

DISTRICT WEST UNION COUNTY BOBBING

CORNER 15' WEST UNION (7 1/2' STRIP) SE

SURFACE OWNER ELIXIA LIPSCOMB ADDRESS [Address]

OIL & GAS ROYALTY OWNER Claude / Pearl Smith / [Address] ADDRESS 408

LEASE NO. K-501-81

PROPOSED WORK: DRILL X CONVERT WELL DRILL DEEPER WELL REFRILL WELL STRUCTURE OR STIMULATE WELL PLUS OFF OLD FORMATION WELL PERFORM NEW FORMATION WELL OTHER PHYSICAL CHANGE IN WELL (SPECIFY) WELL

SEP 7 1979

PLUS AND ABANDON WELL CLEAN OUT AND SERVICE WELL

TARGET FORMATION ALLEN ESTIMATED DEPTH 472-848

WELL OPERATOR [Name] DESIGNATED AGENT [Name] ADDRESS [Address]

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

Date October 5, 1979

FORM IV-35
(Obverse)

Operator's Well No. K-501-1 Revised

[08-78]

WELL OPERATOR'S REPORT
OF

API Well No. 47 - 017 - 2467
State County Per

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: 1210' Watershed: Piggin Run
District: West Union County: Doddridge Quadrangle: West Union 7 1/2

WELL OPERATOR J & J Enterprises, Inc. DESIGNATED AGENT H. L. Barnett
Address P. O. Box 48 Address P. O. Box 48
Buckhannon, West Virginia 26201 Buckhannon, West Virginia 26201

PERMITTED WORK: Drill X / Convert / Drill deeper / Redrill / Fracture or stimulate X
Plug off old formation / Perforate new formation /
Other physical change in well (specify)

PERMIT ISSUED ON August 9, 19 79

OIL & GAS INSPECTOR FOR THIS WORK:

(IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED

Name Paul Garrett
Address 321 Beech Street
Clarksburg, W. Va. 26301

GEOLOGICAL TARGET FORMATION: Alexander Depth 5484-5546 feet

Depth of completed well, 5705 feet Rotary X / Cable Tools

Water strata depth: Fresh, 140 feet; salt, feet.

Coal seam depths: 501; 3090 Is coal being mined in the area? NO

Work was commenced September 19, 19 79, and completed September 24, 19 79

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	H-40	42	X		30.3	0		Kinds
Fresh water	8 5/8	ERW	23	X		1083	1083	310 sks	
Coal	8 5/8	ERW	23	X		1083	1083	310 sks ^{50/50 heat}	PO2 Sieves
Intermediate									
Production	4 1/2	J-55	10.5	X		5641	5641	540 sks. R.F.	Crete set
Tubing									
Liners									Perforations:
									Top Bottom
									5546 5484
									5218 3573

RECEIVED
OCT 9 1979

OPEN FLOW DATA

Producing formation: Alexander 5484-5546 feet

Gas: Initial open flow, 0 Mcf/d Oil: Initial open flow, 0 Ebl/d

Final open flow, Mcf/d Final open flow, Ebl/d

Time of open flow between initial and final tests, hours

Static well pressure, psig (surface measurement) after hours shut in

[If applicable due to multiple completion--]

Second producing formation Benson; Riley; Balltown Pay zone depth: 3573-5218 feet

Gas: Initial open flow, 68 Mcf/d Oil: Initial open flow, 0 Ebl/d

COMBINED Final open flow, 267 Mcf/d Final open flow, 0 Ebl/d

Time of open flow between initial and final tests, hours

OCT 22 1979

[08-78]

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

Alexander Perfs - 5546-5484 - 20 shots	784 Bbls.
	25,000 80/100
	50,000 20/40
enson, Riley, Warren, Balltown -	5218-3573, 25 shots 953 Bbls.
Sand	25,000 80/100
	55,000 20/40

WELL LOG

FORMATION	Color	Hard or Soft	Top Feet	Bottom Feet	Remarks Including indication of all fresh and salt water, coal, oil and gas
Clay			0	15	
Sand			15	50	
Red Rock & Sand			50	145	½" H ₂ O
Sand			145	350	
Red Rock & Shale			350	390	
Coal			390	393	
Shale			393	501	
Coal			501	504	
Shale			504	965	
Sand			965	996	
Red Rock & Shale			996	1120	
Sand & Shale			1120	1652	
Shale			1652	1975	
Sand			1975	2050	
Shale			2050	2100	
Big Lime & Big Injun			2100	2275	
Shale			2275	2300	
Sand			2300	2350	Gas @ 2325
Shale			2350	2480	
Sand			2480	2560	
Shale			2560	2690	
Sand			2690	2700	
Sandy Shale			2700	2900	
Sand			2900	2930	
Sandy Shale			2930	3570	
Sand			3570	3600	
Sandy Sand			3600	3870	
Shale			3870	3920	
Sandy Sand			3920	4110	
Shale			4110	4230	
Sandy Sand			4230	4440	
Shale			4440	4550	
Sandy Sand			4550	4900	
Shale			4900	5000	
Sandy Sand			5000	5200	
nson			5200	5220	Gas @ 5220
Sandy Sand			5220	5480	
Alexander			5480	5550	Gas @ 5520
Shale			5550	5705	

(Attach separate sheets to complete as necessary.)

J & J ENTERPRISES, INC.

Well Operator

By

Peter Battles

PETER BATTLES

Its

Geologist

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."

[08-78]

PROPOSED WORK ORDER

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

DRILLING CONTRACTOR (IF KNOWN) S.W. Jack Drilling Company
Address P.O. Box 48
Buckhannon, W.Va. 26201

GEOLOGICAL TARGET FORMATION, Alexander

Estimated depth of completed well, 5400 feet Rotary / Cable tools /

Approximate water strata depths: Fresh, 80' feet; salt, 980' feet.

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

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	H-40	42	X		30'	30'	40	Kinds NA
Fresh water	8 5/8	ERW	23	X		1200'	1200'	110	
Coal	8 5/8	ERW	23						Sizes NA
Intermediate									
Production	4 1/2	J-55	9.5	X		4300'	4300'	275	Depths set NA
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 drilling within 200 feet of the proposed well.

THIS PERMIT MUST BE POSTED AT THE WELL SITE

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.

All provisions being in accordance with Chapter 22, of the W. Va. Code, the location is hereby approved

for drilling. This permit shall expire if

operations have not commenced by 4-9-80.


Deputy Director - Oil & Gas Division

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:

W A I V E R

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