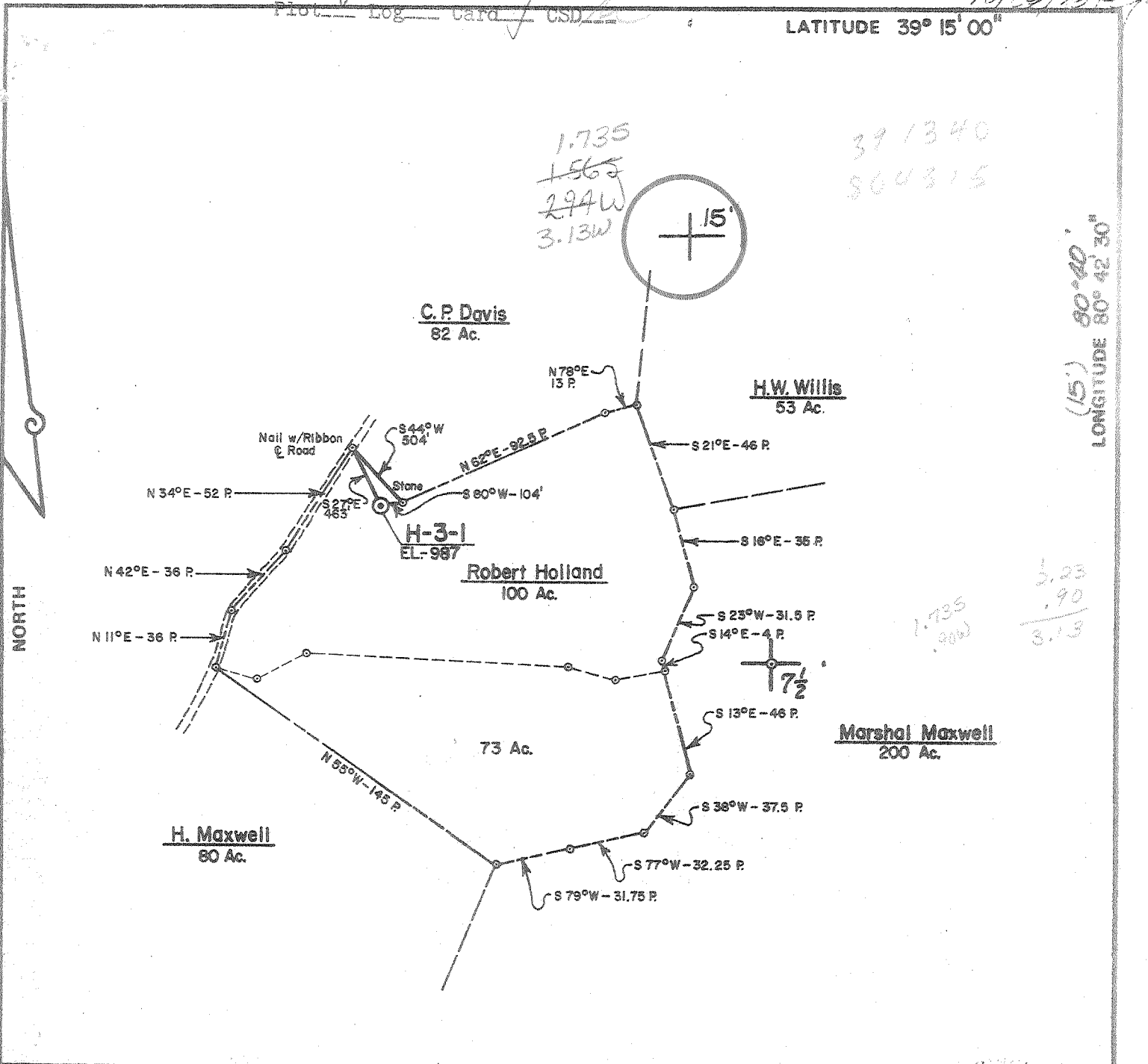


39 1340  
80 4315

(15) 80-40  
LONGITUDE 80° 42' 30"

1.735  
1.565  
2.94W  
3.13W



1.735  
2.90  
3.13

FILE NO. \_\_\_\_\_  
DRAWING NO. \_\_\_\_\_  
SCALE 1" = 1,000'  
MINIMUM DEGREE OF ACCURACY 1 Part In 200'  
PROVEN SOURCE OF ELEVATION Rd. Fks. S.L.S. Rt. 40 & S.L.S. 40/3 U.E. 872'

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) Kenil S. Whalen  
R.P.E. \_\_\_\_\_ L.L.S. 530

PLACE SEAL HERE

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



DATE October 17 19 79  
OPERATOR'S WELL NO. H-3-1  
API WELL NO. 47-017-2521  
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 X STORAGE \_\_\_ DEEP \_\_\_ SHALLOW X  
LOCATION: ELEVATION 987' WATER SHED Grouse Run  
DISTRICT New Milton COUNTY Doddridge  
QUADRANGLE New Milton 7.5', VADIS 15' NW  
SURFACE OWNER Dr. Aaron Schwartzman ACREAGE 100  
OIL & GAS ROYALTY OWNER Robert Holland LEASE ACREAGE 100  
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 Alexander ESTIMATED DEPTH 5150' NOV 14 1979  
WELL OPERATOR J. & J. Enterprises DESIGNATED AGENT Harry Barnett  
ADDRESS P.O. Box 48 ADDRESS P.O. Box 48  
Buchannon, W. Va. 26201 Buchannon, W. Va. 26201

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

WELL OPERATOR'S REPORT 7  
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: 987 Watershed: Grouse Run  
District: New Milton County: Doddridge Quadrangle: New Milton 7.5'

WELL OPERATOR J & J Enterprises, Inc. DESIGNATED AGENT H.L. Barnett  
Address Box 48 Address Box 48  
Buckhannon, WV 26201 Buckhannon, WV 26201

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

PERMIT ISSUED ON 10-29, 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 St.  
Clarksburg, WV 26301

GEOLOGICAL TARGET FORMATION: Alexander Depth 5080 feet  
Depth of completed well 5337 feet Rotary X / Cable Tools       
Water strata depth: Fresh 470 feet; salt, None feet.  
Coal seam depths: 960-63 Is coal being mined in the area? No  
Work was commenced 4-22, 1980, and completed 4-28, 19 80

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	13/4H-40	42	X			31	0	0 sks	Kinds
Fresh water	85/8ERW	23	X			1089.65	1089.65	250 sks	
Coal	85/8ERW	23	X			1089.65	1089.65	250 sks	Sizes
Intermediate									
Production	1/2 J-55	10.5	X			5246.20	5246.20	550 sks	Depths set
Tubing									
Liners									Perforations:
									Top Bottom
									4962 5173
									4360 4828
									3924 4232
									3184 3282

OPEN FLOW DATA  
Producing formation Alexander 880 MCF OIL & GAS DIVISION  
pay zone depth 4962-5173 feet  
DEPT. OF MINES  
Gas: Initial open flow,      Mcf/d Oil: Initial open flow,      Bbl/d  
Combined Final open flow, 880 Mcf/d Final open flow,      Bbl/d  
Time of open flow between initial and final tests, 4 hours  
Static rock pressure, 1150 psig (surface measurement) after 50 hours shut in

[If applicable due to multiple completion--]  
Second producing formation Benson & Riley Bradford Warren Pay zone depth 4360-4828 BRNN Brad Benson & Riley  
Gas: Initial open flow,      Mcf/d Oil: Initial open flow,      Bbl/d  
Final open flow,      Mcf/d 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

[08-78]

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

Alexander: Perforating- 4962-5173 (13 holes)

Fracturing: 750 gal. Acid: 150 sks. 80/100 sand: 300 sks. 20/40 sa  
542 Bbls. fluid

Benson & Riley: Perforating: 4360-4828 (13 holes)

Fracturing: 500 gal Acid: 315 sks. 80/100 sand: 1293 sks. 20  
sand: 565 Bbls. Fluid.

Bradford: Perforating: 3924-4232 (12 holes)

Fracturing: 800 gal Acid: 100 sks 80/100 sand: 300 sks. 20/40 sand:  
532 Bbls fluid.

Warren: Perforating: 3184-3282 (17 holes)

Fracturing: 500 gal Acid: 200 sks. 80/100 sand: 300 sks 20/40 sand:  
578 Bbls Fluid

WELL LOG

FORMATION	Color	Hard or Soft	7 Top Feet	Bottom Feet	Remarks Including indication of all fresh and salt water, coal, oil, gas
Fill			0	15	
Red Rock			15	25	
Shale			25	35	Wet @ 4-' w. 1/2" to 3/4" stream
Red Rock & Shale			35	58	
Sand & Shale			58	85	
Sand			85	97	
Shale & Red Rock			97	120	
Sand & Shale			120	149	
Sand			149	165	
Sand & Shale			165	198	
Red Rock & Shale			194	205	Damp @ 205'
Red Rock			205	210	
Red Rock, Shale & Sand			210	220	
Red Rock			220	230	
Red Rock & Shale			730	310	Damp @ 255'
Sand & Shale			310	355	
Sand			355	380	
Red Rock & Shale			380	585	1 1/2" stream @ 470'
Red Rock			585	610	
Sand & Shale			610	625	
Red Rock			625	635	
Sand & Shale			635	795	
Red Rock			795	810	
Sand & Shale			810	960	
Coal			960	963	
Red Rock & Shale			963	1045	
Red Rock			1045	1060	
Sand, Shale & Sand			1060	1248	
Sand			1248	1310	
Sand & Shale			1310	1830	water @ 1315'
Little Lime			- 1830	1865	
Big Lime			- 1865	1922	

(Attach separate sheets to complete as necessary.)

J & J Enterprises, Inc.

Well Operator

By Daniel Stark  
Geologist

NOTE: Regulation 2.02(d) 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	Remarks Including indication of all fresh and salt water, coal, oil and gas
Big Injun			1922	1962	
Shale			1962	2100	
Weir			2100	2188	
Sand & Shale			2188	2310	
Berea			2310	2319	
Sand & Shale			2319	2530	
Gordon			2530	2540	
Sand & Shale			2540	3176	
Warren			3176	3288	
Sand & Shale			3288	3916	
Bradford			3916	4238	
Sand & Shale			4238	4352	
1st. Riley			4352	4384	
Shale			4384	4600	
2nd Riley			4600	4638	
Sand & Shale			4638	4822	Gas @ 4812 30/10 thru 1" w/water
Benson			4822	4828	
Sand & Shale			4828	5080	Gas @ 4996 38/10 thru 1" w/water
Alexander			5080	5174	
Shale			5174	5337	T.D. 5337

JUN 16 1980



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, 5150 feet Rotary X / Cable tools      /

Approximate water strata depths: Fresh, 100 feet; salt, 1000 feet.

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


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	0	0	Kinds None
Fresh water	8 5/8	ERW	23	X		1200	1200	280 sks.	
Coal	8 5/8	ERW	23	X		1200	1200	280 sks.	Sizes
Intermediate									
Production	4 1/2	J-55	10.5	X			5100	250 sks.	Depths set
Tubing									
Liners									Perforations: <u>    </u>
									Top <u>    </u> Bottom <u>    </u>

**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.

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 6-30-80

  
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