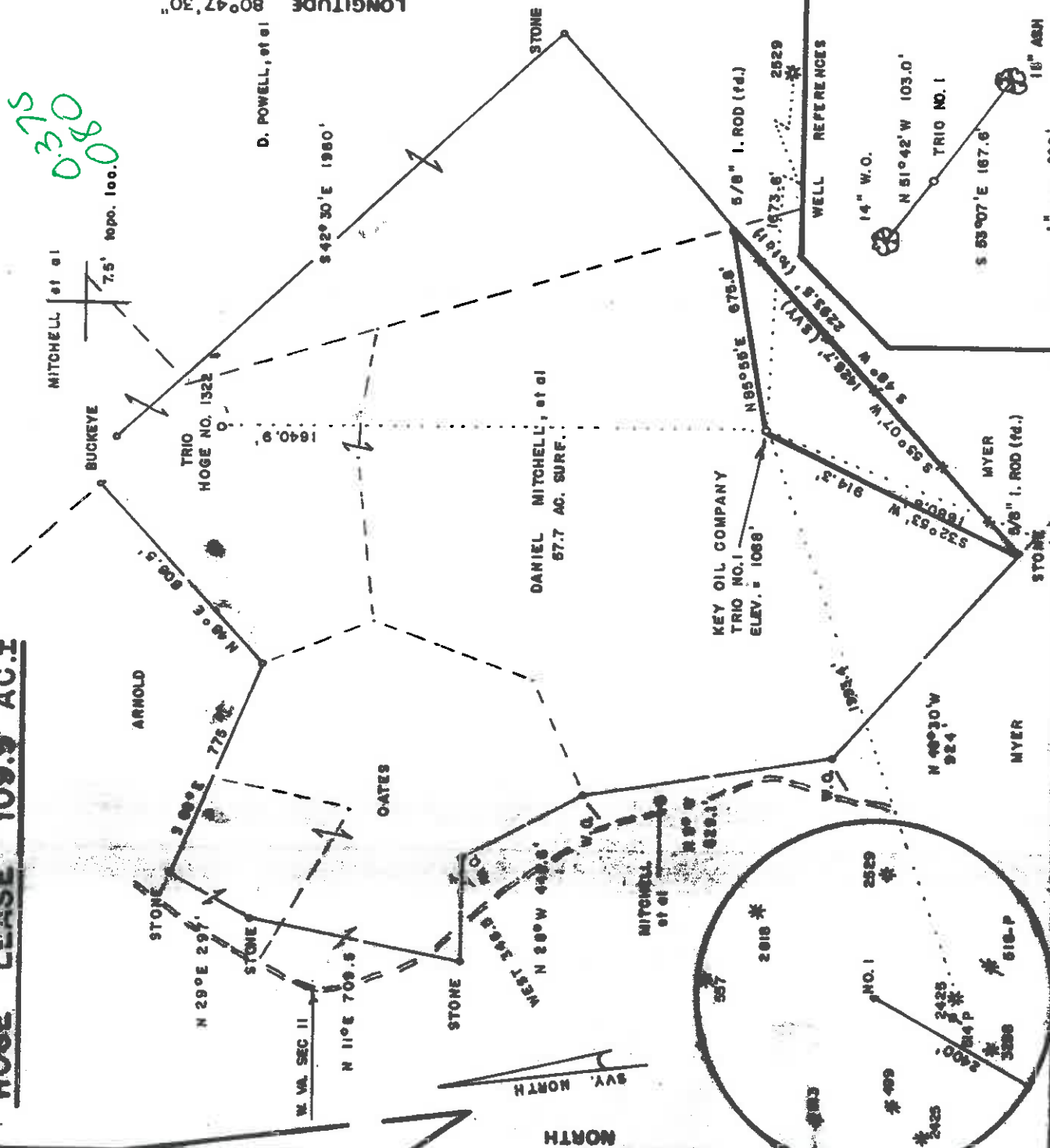


**HOGE LEASE 109.5 AC.±**

LATITUDE 39°17'30" W

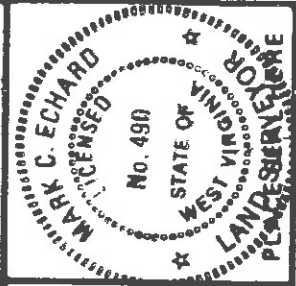
LONGITUDE 80°47'30" S



FILE NO. \_\_\_\_\_  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 500'  
 MINIMUM DEGREE OF ACCURACY 1/200  
 PROVEN SOURCE OF ELEVATION TOP OF KNOB  
 SOUTH OF LEASE ELEV. = 1215

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.

*Mark C. Echard*  
 (SIGNED) MARK C. ECHARD  
 R.P.E. 3288 L.L.S. 490



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



DATE JULY 29 19 96  
 OPERATOR'S WELL NO. TRIO NO. 1  
 API WELL NO. 47-017-04291  
 STATE COUNTY PERMIT

STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION

WELL TYPE: OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL   
 (IF "GAS") PRODUCTION  STORAGE  DEEP  SHALLOW   
 LOCATION: ELEVATION 1068' WATER SHED ARNOLD CREEK

DISTRICT CENTRAL COUNTY DODDRIDGE  
 QUADRANGLE WEST UNION 7.5  
 SURFACE OWNER DANIEL MITCHELL, et al ACREAGE 57.7 & 109.5  
 OIL & GAS ROYALTY OWNER TRIO PETROLEUM CORP. et al LEASE ACREAGE 109.5

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 ALEXANDER ESTIMATED DEPTH 5600'  
 WELL OPERATOR KEY OIL COMPANY DESIGNATED AGENT JAN CHAPMAN  
 ADDRESS 22 GARTON PLAZA WESTON, W. VA 26452  
 WESTON, W. VA 26452 475

AUG 28 1996

State of West Virginia  
Division of Environmental Protection  
Section of Oil and Gas

Permitting  
Office of Oil & Gas

Well Operator's Report of Well Work

Farm name: MITCHELL, DANIEL R. ETAL Operator Well No.: TRIO #1

LOCATION: Elevation: 1,068.00 Quadrangle: WEST UNION

District: CENTRAL County: DODDRIDGE  
Latitude: 1900 Feet South of 39 Deg. 17 Min. 30 Sec.  
Longitude: 4200 Feet West of 80 Deg. 47 Min. 30 Sec.

Company: KEY OIL COMPANY  
22 Garton Plaza  
WESTON, WV 26452-0000

Agent: JAN E. CHAPMAN

Inspector: MIKE UNDERWOOD  
Permit Issued: 08/19/96  
Well Work Commenced: 08/26/96  
Well Work Completed: 09/03/96  
Verbal Plugging  
Permission granted on: \_\_\_\_\_  
Rotary X Cable \_\_\_\_\_ Rig  
Total Depth ( feet ) 5540'  
Fresh water depths ( ft ) NONE  
Salt water depths ( ft ) 615', 802'

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
11 3/4"			
8 5/8"	1066	1066	285 sks To Surface
4 1/2"	5406	5406	430 sks
2 3/8"		5271	

Is coal being mined in area ( Y / N )? N  
Coal Depths ( ft ): None Reported

OPEN FLOW DATA

Speechley 3466' - 3574'  
Balltown 3772' - 4516'  
Rileys 4564' - 4978'  
Benson 5026' - 5036'  
Alexander 5268' - 5360'

Producing formation \_\_\_\_\_  
Gas: Initial open flow \_\_\_\_\_ MCF / d  
Final open flow 1,476 MCF / d  
Time of open flow between initial and final tests \_\_\_\_\_  
Static rock pressure 1700 psig ( surface pressure ) after \_\_\_\_\_ 96 Hours

Second producing formation \_\_\_\_\_  
Gas: Initial open flow \_\_\_\_\_ MCF / d  
Final open flow \_\_\_\_\_ MCF / d  
Time of open flow between initial and final tests \_\_\_\_\_  
Static rock pressure \_\_\_\_\_ psig ( surface pressure ) after \_\_\_\_\_ Hours

Pay zone depth ( ft ) \_\_\_\_\_  
Oil: Initial open flow \_\_\_\_\_ Bbl / d  
Oil: Final open flow show \_\_\_\_\_ Bbl / d  
Hours \_\_\_\_\_

Pay zone depth ( ft ) \_\_\_\_\_  
Oil: Initial open flow \_\_\_\_\_ Bbl / d  
Oil: Final open flow \_\_\_\_\_ Bbl / d  
Hours \_\_\_\_\_

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

For: KEY OIL COMPANY

By: 

Date: 3-26-97

APR 26 1997  
PRESIDENT

Trio #1 (47-017-04291)  
Four Stage Foam Frac - Halliburton

1st Stage:	Alexander ( 12 holes ) ( 5291.25' - 5343' )	60 Quality Foam, 500 gal, 15% HCL. 60,000# 20/40 sand, 550,000 SCF N2, 810 bbis foam.
2nd Stage:	Benson ( 7 holes ) ( 5029' - 5030.5' ) Third Riley (3 holes ) ( 4964' - 4964.5' )	60 Quality Foam, 750 gal, 15% HCL. 35,000# 20/40 sand, 428,000 SCF N2, 517 bbis foam.
3rd Stage:	Riley ( 5 holes ) ( 4590.75' - 4603' ) Balltown ( 7 holes ) ( 4381.25' - 4485.25' )	60 Quality Foam, 1000 gal, 15% HCL. 10,000# 80/100 sand, 30,000# 20/40 sand, 508,000 SCF N2, 551 bbis foam.
4th Stage:	Balltown ( 9 holes ) ( 3978.5' - 4024.5' ) Speechley (4 holes ) ( 3563.5' - 3564.25' )	60 Quality Foam, 1,000 gal, 15% HCL. 5,000# 80/100 sand, 35,000# 20/40 sand, 390,000 SCF N2, 589 bbis foam.

WELL LOG

Fill	0	3	
Sand & Shale & Red Rock	3	80	
Sand & Shale	80	352	
Sand & Red Rock	352	476	
Shale & Red Rock	476	583	
Sand & Shale & Red Rock	583	746	
Lime	746	759	
Lime & Sand & Shale	759	977	½" H <sup>2</sup> O @ 802'
Sand & Shale	977	1992	
Little Lime	1992	2008	
Sand & Shale	2008	2033	
Big Lime	2033	2093	
Big Injun	2093	2173	
Shale	2173	2326	
Weir	2326	2440	
Shale	2440	2528	
Berea	2528	2536	
Sand & Shale	2536	3396	
Warren	3396	3452	
Shale	3452	3466	
Speechley	3466	3574	
Shale	3574	3772	
Balltown	3772	4516	
Shale & Sand	4516	4564	
Riley	4564	4634	
Shale	4634	4828	
2 <sup>nd</sup> Riley	4828	4875	
Shale	4875	4920	
3 <sup>rd</sup> Riley	4920	4978	
Sand & Shale	4978	5026	
Benson	5026	5036	
Sand & Shale	5036	5268	
Alexander	5268	5360	
Sand & Shale	5360	5492	
T.D.	5492		

**Gas Checks**  
 1949' No Show  
 2166' 4/10ths ½" w/H<sup>2</sup>O  
 2504" No Show  
 2996' 4/10ths ½" w/H<sup>2</sup>O  
 3866' 2/10ths ½" w/H<sup>2</sup>O  
 4420' 2/10ths ½" w/H<sup>2</sup>O  
 4821' 2/10ths ½" w/H<sup>2</sup>O  
 5099' 4/10ths ½" w/H<sup>2</sup>O  
 5490' 510ths ½" w/H<sup>2</sup>O  
 Collars No Show

STATE OF WEST VIRGINIA  
 DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS  
 WELL WORK PERMIT APPLICATION

1) Well Operator: 475 KEY OIL COMPANY 25655 ① 671  
 Operator's Well Number: Trio #1 3) Elevation: 1068'

Well type: (a) Oil X / or Gas X / Issued 08/19/96  
 (b) If Gas: Production X / Underground Storage / Expires 08/19/98  
 Deep / Shallow X /

Proposed Target Formation(s): ALEXANDER  
 Proposed Total Depth: 5500 feet

6) Approximate fresh water strata depths: 100

8) Approximate salt water depths: NONE REPORTED ON OFFSET WELLS

9) Approximate coal seam depths: NONE

10) Does land contain coal seams tributary to active mine? Yes / No X /

11) Proposed Well Work: DRILL, STIMULATE, PRODUCE Produced

12) CASING AND TUBING PROGRAM

TYPE	SIZE	GRADE	WEIGHT per ft.	FOR drilling	LEFT in well	FILL-up (cu. ft.)
Conductor	11 3/4	ERW	42	42	0	<u>3859/113</u>
Fresh Water	8 5/8	ERW	23	1068	1068	290 SKS. TO SURFACE
Coal						<u>3859/113</u>
Intermediate						
Production	4 1/2	J-55	10.5	5400	5400	450 SKS.
Tubing	1.5					<u>3859/113</u>
Liners						

RECEIVED  
 WV Division of Environmental Protection  
 AUG 14 1996

PACKERS : Kind \_\_\_\_\_ Sizes \_\_\_\_\_ Depths set \_\_\_\_\_  
 For Office of Oil and Gas Only

Fee(s) paid: Plat WW-9 Well Work Permit Reclamation Fund WPCP  
Bond Agent

**RECEIVED**  
WV Division of  
Environmental Protection

AUG 14 1996

1) Date: August 6, 1996  
2) Operator's well number  
Trio #1  
3) API Well No: 47 - 017 - 4291  
State County Permit

Permitting  
Office of Oil & Gas  
STATE OF WEST VIRGINIA - BUREAU OF ENVIRONMENT  
DIVISION OF ENVIRONMENTAL PROTECTION  
OFFICE OF OIL AND GAS

NOTICE AND APPLICATION FOR A WELL WORK PERMIT

4) Surface Owner(s) to be served:

(a) Name	Daniel R. Mitchell	5) (a) Coal Operator:	Name	
Address	123 Harrison Avenue Greensburg, PA 15601	Address		
(b) Name	Donald Waxter	(b) Coal Owner(s) with Declaration	Name	
Address	123 Harrison Avenue Greensburg, PA 15601	Address		
(c) Name	William P. Bleckley	Name		
Address	123 Harrison Avenue Greensburg, PA 15601	Address		
Inspector	Mike Underwood	(c) Coal Lessee with Declaration	Name	
Address	RT. 2 Box 135 Salem, WV 26426	Address		
Telephone	(304) - 782-1043			

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  
 Included is the information required by Chapter 22, Article 6, Section 8(d) of the Code of West Virginia (see page 2)

I certify that as required under Chapter 22 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)  
 Certified Mail (Postmarked postal receipt attached)  
\_\_\_\_\_  
Publication (Notice of Publication attached)  
-----

I have read and understand Chapter 22-6 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.

Weld Operator Key Oil Company  
By: [Signature]  
Its: President  
Address 22 Garton Plaza  
Weston, WV 26452  
Telephone 304-269-7102

Subscribed and sworn before me this 6th day of August, 1996

My commission expires March 24, 2003

[Signature]  
Karen Cook



OFFICIAL STATE NOTARY PUBLIC  
STATE OF WEST VIRGINIA  
KAREN COOK  
ROUTE 2, BOX 1  
LANE LEW, WV 26378  
My Commission Expires Mar. 24, 2003