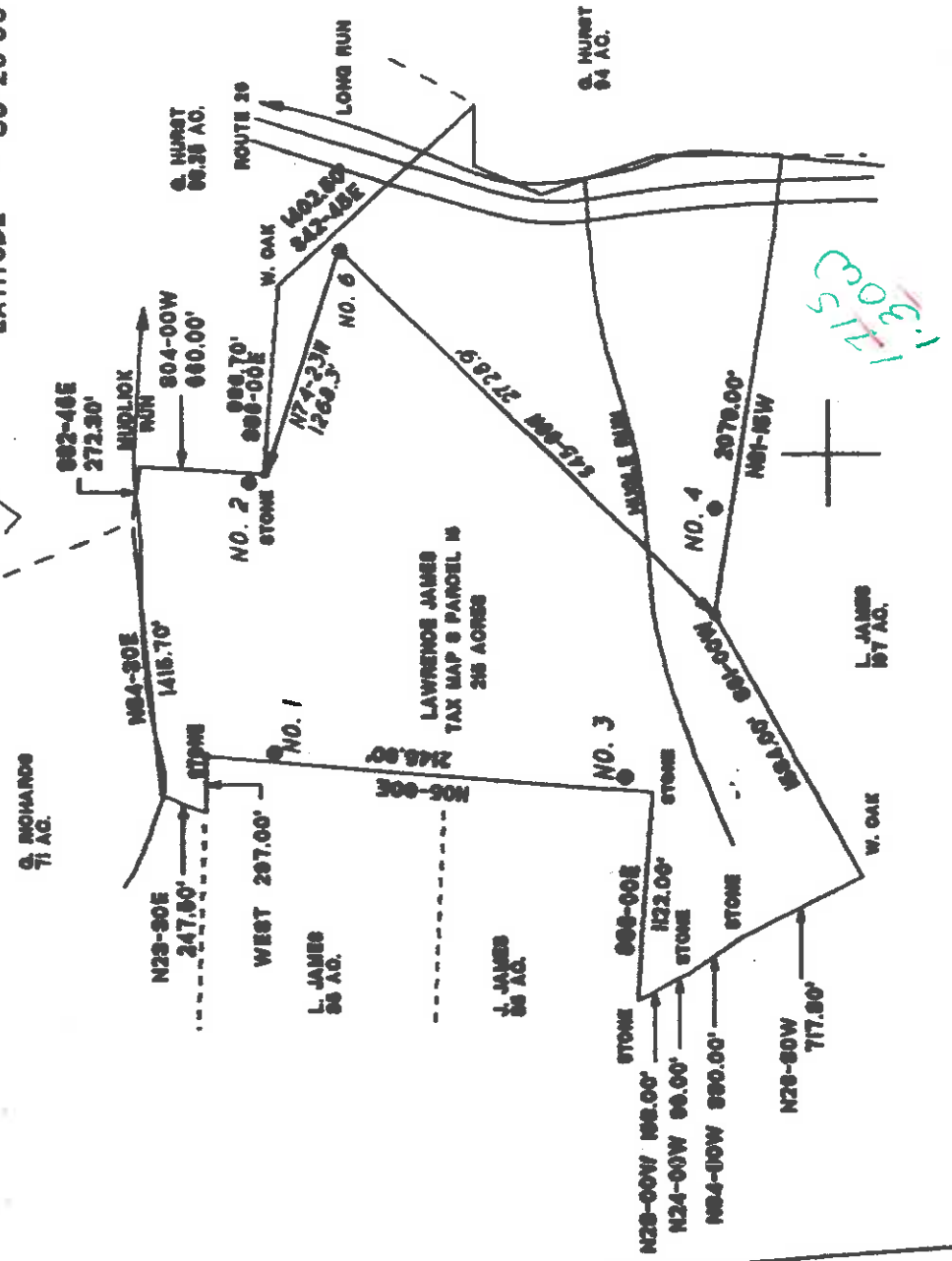


LATITUDE 39°20'00"

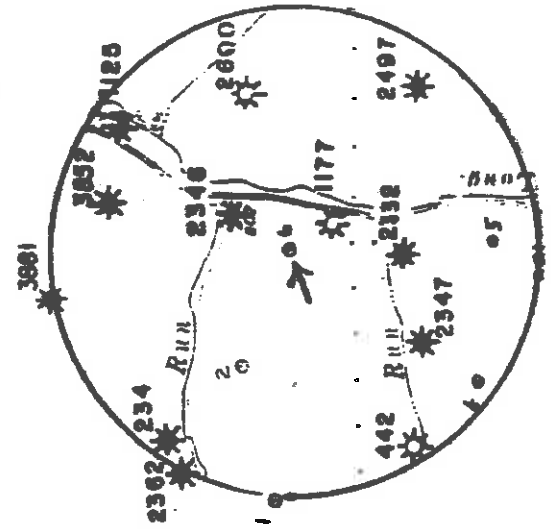
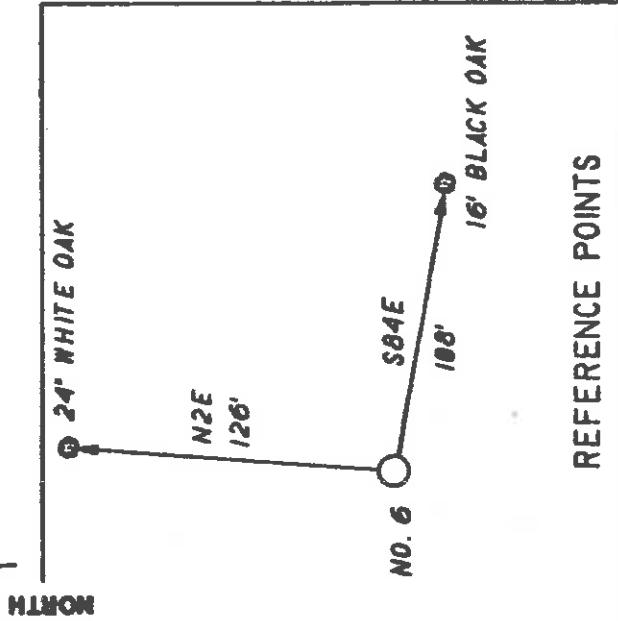
LONGITUDE 80°50'00"

0.750'

8.950'

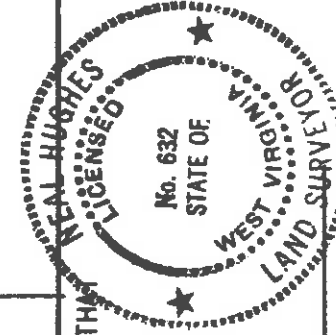


1.715
1.300c



REFERENCE POINTS

I THE UNDERSIGNED, DO HEREBY CERTIFY THAT THIS PLAN 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.



(*) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS
 DATE APRIL 15 19 94
 OPERATORS WELL NO. JAMES NO. 6

L.L.S. Neal Hughes
 632

API WELL NO. 47 - 017 - 4134
 COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1/200 FILE NO. 93-106
 PROVEN SOURCE OF ELEVATION KNOB 1118' SCALE 1"=1000'

WELL TYPE: OIL GAS LIQUID WASTE DISPOSAL IF "GAS" PRODUCTION STORAGE DEEP SHALLOW
 LOCATION ELEVATION 975' WATERSHED MUDLICK RUN

DISTRICT CENTRAL COUNTY DODDRIDGE QUADRANGLE WEST UNION NIS SC
 SURFACE OWNER LAWRENCE JAMES ACREAGE 215
 ROYALTY OWNER LAWRENCE JAMES LEASE ACREAGE 215

PROPOSED WORK:
 DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION PLUG AND ABANDON CLEAN OUT AND REPLUG OTHER
 PHYSICAL CHANGE IN WELL (SPECIFY) 6-6 89 TARGET FORMATION ALEXANDER ESTIMATED DEPTH 5500' 3-7 1994

WELL OPERATOR KEY OIL CO. 475 DESIGNATED AGENT JAN CHAPMAN
 ADDRESS 22 GARTON PLAZA WESTON WV 26452
 COUNTY NAME PERMIT

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

Well Operator's Report of Well Work

Farm name: JAMES, LAWRENCE L. Operator Well No.: JAMES #6

LOCATION: Elevation: 975.00 Quadrangle: WEST UNION
District: CENTRAL County: DODDRIDGE
Latitude: 8950 Feet South of 39 Deg. 20Min. Sec.
Longitude 6750 Feet West of 80 Deg. 50 Min. Sec.

Company: KEY OIL COMPANY
22 GARTON PLAZA
WESTON, WV 26452-0000

Agent: JAN E. CHAPMAN

Inspector: MIKE UNDERWOOD
Permit Issued: 05/31/94
Well work Commenced: 7-5-94
Well work Completed: 7-10-94
Verbal Plugging
Permission granted on: Rig
Rotary Cable
Total Depth (feet) 5277
Fresh water depths (ft) 190'

Salt water depths (ft) 1411'

Is coal being mined in area (Y/N)? N
Coal Depths (ft): 1411' - 1414'

OPEN FLOW DATA
Balltown
Riley
3rd Riley
Benson

Producing formation Alexander
Gas: Initial open flow 0 MCF/d Oil: Initial open flow 0 Bbl/d
Final open flow 712 MCF/d Final open flow Show Bbl/d
Time of open flow between initial and final tests N/A Hours
Static rock Pressure 1550 psig (surface pressure) after 96 Hours

Second producing formation
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 pressure) after Hours

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
11 3/4	133	133	80 sks. to surface
8 5/8	1530	1530	340 sks. to surface
4 1/2		5226	400 sks.
1 1/2		5087	

3724-3732
4414-4460
4728-4738

4834-4840
5118-5146

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.

RECEIVED
WV Division of
Environmental Protection

AUG 09 1994

Permitting
Office of Oil & Gas

For: KEY OIL COMPANY

By: *Jan E. Chapman* President

Date: August 4, 1994

AUG 26 1994

James #6 (47-017-4134)
4 Stage Foam Frac - Halliburton

Stage 1: Alexander 5101.25' - 5137.25' (10 holes) 60 Quality Foam, 750 gal. 15% HCl, 30,000 lbs. 20-40 sand, 358,000 SCF N₂, 523 bbls. Foam.

Stage 2: Benson & 3rd Riley 4731' - 4836.75' (10 holes) 75 Quality Foam, 750 gal. 15% HCl, 25,000 lbs. 20-40 sand, 397,000 SCF N₂, 470 bbls. Foam.

Stage 3: Riley 4415.25' - 4435.75' (10 holes) 60 Quality Foam, 750 gal. 15% HCl, 10,000 lbs. 80-100 sand, 30,000 lbs. 20-40 sand, 466,000 SCF N₂, 656 bbls. Foam.

Stage 4: Balltown 3716.75' - 3719' (10 holes) 60 Quality Foam, 750 gal. 15% HCl, 25,000 lbs. 20-40 sand, 280,000 SCF N₂, 418 bbls. Foam.

WELL LOG

FORMATION	TOP FEET	BOTTOM FEET	REMARKS
Clay	0	10	
Shale	10	30	3/4" Stream H ₂ O @ 190'
Sand and Shale	30	150	3/4" Stream H ₂ O @ 1411'
Red Rock and Shale	150	190	
Sand	190	274	
Red Rock and Shale	274	294	
Sand and Shale	294	675	
Red Rock and Shale	675	990	
Sand and Shale	990	1411	1695 N/S
Coal	1411	1414	1960 N/S
Sand and Shale	1414	1810	2529 N/S
Little Lime	1810	1850	2995 N/S
Big Lime	1850	1958	3525 N/S
Big Injun	1958	2006	4002 N/S
Sand and Shale	2006	3724	4687 N/S
Balltown	3724	3732	4997 N/S
Sand and Shale	3732	4414	T.D.
Riley	4414	4460	Dri ll Collars N/S
Sand and Shale	4460	4728	
3rd Riley	4728	4738	
Sand and Shale	4738	4834	
Benson	4834	4840	
Sand and Shale	4840	5118	
Alexander	5118	5146	
Shale	5146	5277	T.D.

Gas Checks:

1695 N/S
1960 N/S
2529 N/S
2995 N/S
3525 N/S
4002 N/S
4687 N/S
4997 N/S
T.D. N/S
Dri~~ll~~ Collars N/S

RECEIVED
NY Division of
Environmental Protection
AUG 09 1994
Permitting
Office of Oil & Gas

19350

RECEIVED

017-4134

FORM #W-28

MAY 26 9 47 AM '94

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

WELL WORK PERMIT APPLICATION

475 Kev Oil Company 25655 ① 671

Page of 05/31/94

- 1) Well Operator: Kev Oil Company 25655 ① 671
- 2) Operator's Well Number: James #6 975 3) Elevation: 19250

Well type: (a) Oil or Gas
 (b) IF Gas: Production Undergound Storage Shallow
 Deep 439

Proposed Target Formation(s): Alexander

Proposed Total Depth: 5300 feet

Approximate fresh water strata depths: 100'

Approximate salt water depths: -0-

Approximate coal seam depths: None

Does Land contain coal seams tributary to active mine? Yes No

Proposed Well Work: Drill, Stimulate, Produce

12)

CASING AND TUBING PROGRAM

TYPE	SIZE	GRADE	WEIGHT PER FT.	FOOTAGE	INTERVALS	LEFT IN WELL	FILLING (CU. FT.)
Conductor	16"	Used		20		0	
Fresh Water	11 3/4"	ERW	42	132		132	70 SKS. TO SURFACE
Coal							400 SKS. TO SURFACE
Intermediate	8 5/8"	ERW	23	1490		1490	20.0 K. MUD
Production	4 1/2"	J-55	10.5			5225	
Tubing	1.5"						260 SKS.
Liners							

PACKERS : Kind _____ Sizes _____ Depths set _____

FOR DIVISION OF OIL AND GAS USE ONLY
 Fee(s) paid: Well Work Permit Reclamation Fund
 State MW-1 MW-1B Bond

Permitting
Office of Oil & Gas

1) Date: May 4, 1994
2) Operator's well number
James #6
3) API Well No: 47 - 017 - 4134
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 Lawrence L. James
Address Rt. 1 Box 104
Greenwood, WV 26360
 - (b) Name _____
Address _____
 - (c) Name _____
Address _____
- 5) (a) Coal Operator:
Name None
Address _____
- (b) Coal Owner(s) with Declaration
Name _____
Address _____
- Name _____
Address _____
- (c) Coal Lessee with Declaration
Name _____
Address _____
- 6) Inspector Mike Underwood
Address Rt. 2 Box 135
Salem, WV 26426
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 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:

X Personal Service (Affidavit attached)
____ 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.



OFFICIAL SEAL - NOTARY PUBLIC
STATE OF WEST VIRGINIA
KAREN COOK
FOURTEEN 2, SIXTY ONE
JANE LEWIS, WV 26378
My Commission Expires Mar. 24, 2003

Well Operator Key Oil Company
By: _____
Its: President
Address 22 Garton Plaza
Weston, WV 26452
Telephone 304-269-7102

Subscribed and sworn before me this 4th day of May, 1994

Karen Cook Notary Public
My commission expires March 24, 2003