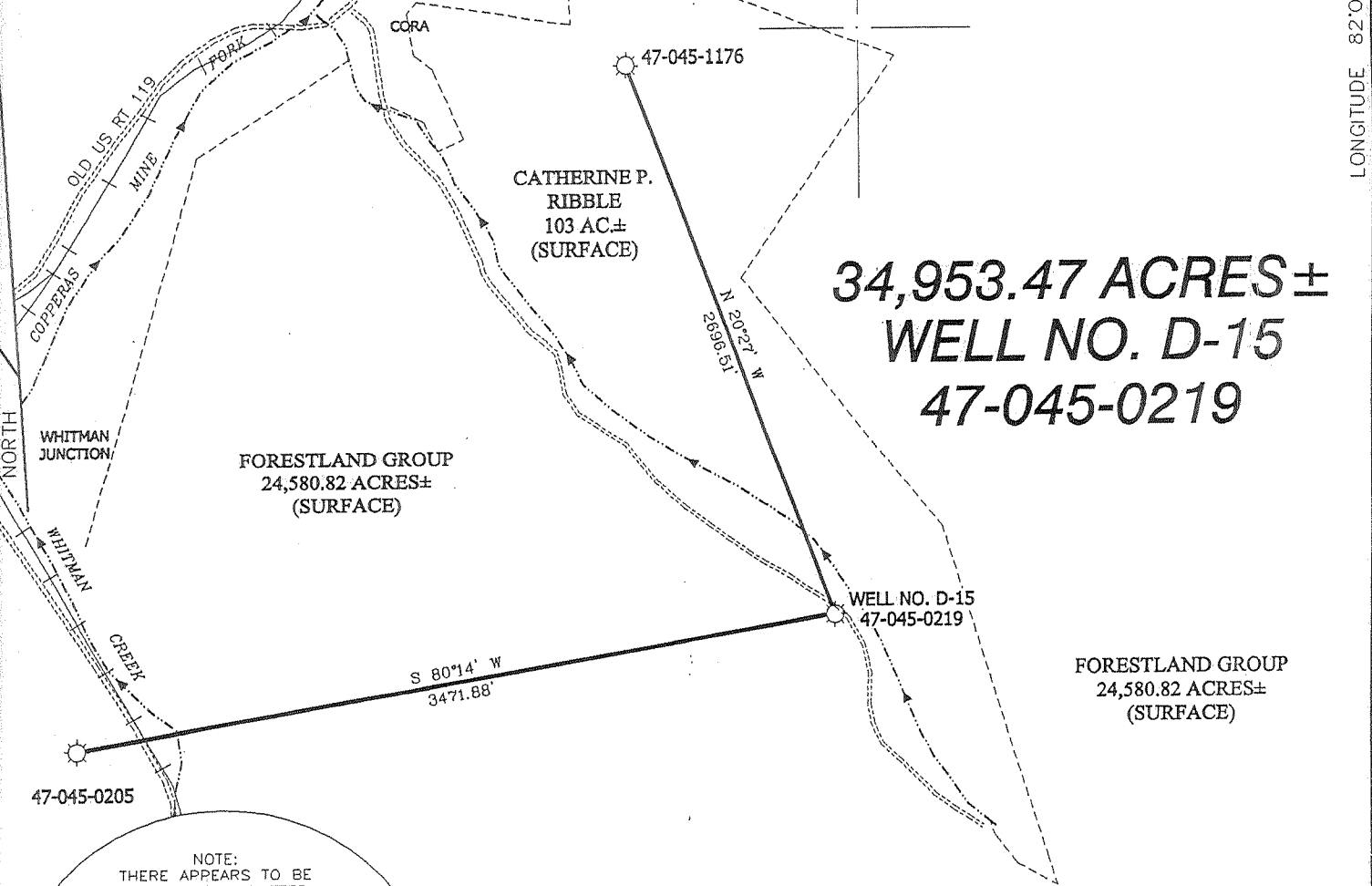
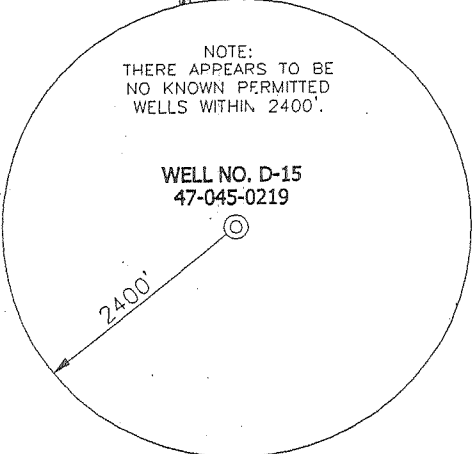


# ISLAND CREEK COAL COMPANY LEASE



**34,953.47 ACRES±  
WELL NO. D-15  
47-045-0219**



**NOTES ON SURVEY**

1. TIES TO WELLS ARE BASED ON STATE PLANE GRID NORTH WV SOUTH ZONE NAD '27.
2. LEASE BOUNDARY DOES NOT FALL WITHIN THE SCOPE OF THIS PLAT.
3. SURFACE OWNER AND ADJOINER INFORMATION TAKEN FROM THE ASSESSOR AND COUNTY CLERK RECORDS OF LOGAN COUNTY IN APRIL, 1999.
4. WELL LAT./LONG. ESTABLISHED BY DGPS(SUBMETER MAPPING GRADE).

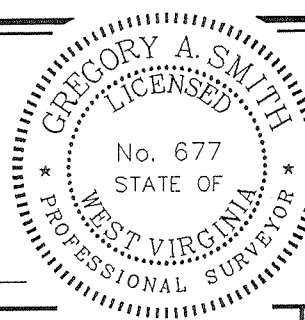
WELL NO. D-15  
STATE PLANE  
COORDINATES

(N) 303,312  
(E) 1,705,413



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 ENERGY.


P.S. 677 Gregory A. Smith



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.  
DATE MAY 13, 19 99  
OPERATORS WELL NO. D-15  
API WELL NO. 47 - 045 - 02197  
STATE COUNTY PERMIT  
**CANCELLED**

MINIMUM DEGREE OF ACCURACY 1 / 2500 FILE NO. 3890PD15 (76-35)  
PROVEN SOURCE OF ELEVATION TOP OF KNOB ELEVATION 1805' SCALE 1" = 800'

STATE OF WEST VIRGINIA  
DIVISION OF ENVIRONMENTAL PROTECTION  
OFFICE OF OIL AND GAS



WELL TYPE : OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL  IF "GAS" PRODUCTION  STORAGE  DEEP  SHALLOW

LOCATION :  
ELEVATION 1035' WATERSHED TRIBUTARY OF COPPERAS MINE FORK  
DISTRICT ISLAND CREEK COUNTY LOGAN QUADRANGLE HOLDEN 7.5'

SURFACE OWNER FORESTLAND GROUP ACREAGE 24,580.82  
ROYALTY OWNER ISLAND CREEK COAL COMPANY LEASE ACREAGE 34,953.47  
PROPOSED WORK : LEASE NO. 80662

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) FRAC BEREA AND TARGET FORMATION BEREA  
COMINGLE ALL ZONES ESTIMATED DEPTH 2850 4750'

WELL OPERATOR BLAZER ENERGY CORPORATION DESIGNATED AGENT RICHARD SMELTZER  
ADDRESS P.O. BOX 2347 CHARLESTON, WV 25328 ADDRESS P.O. BOX 2347 CHARLESTON, WV 25328

JAN 21 2005

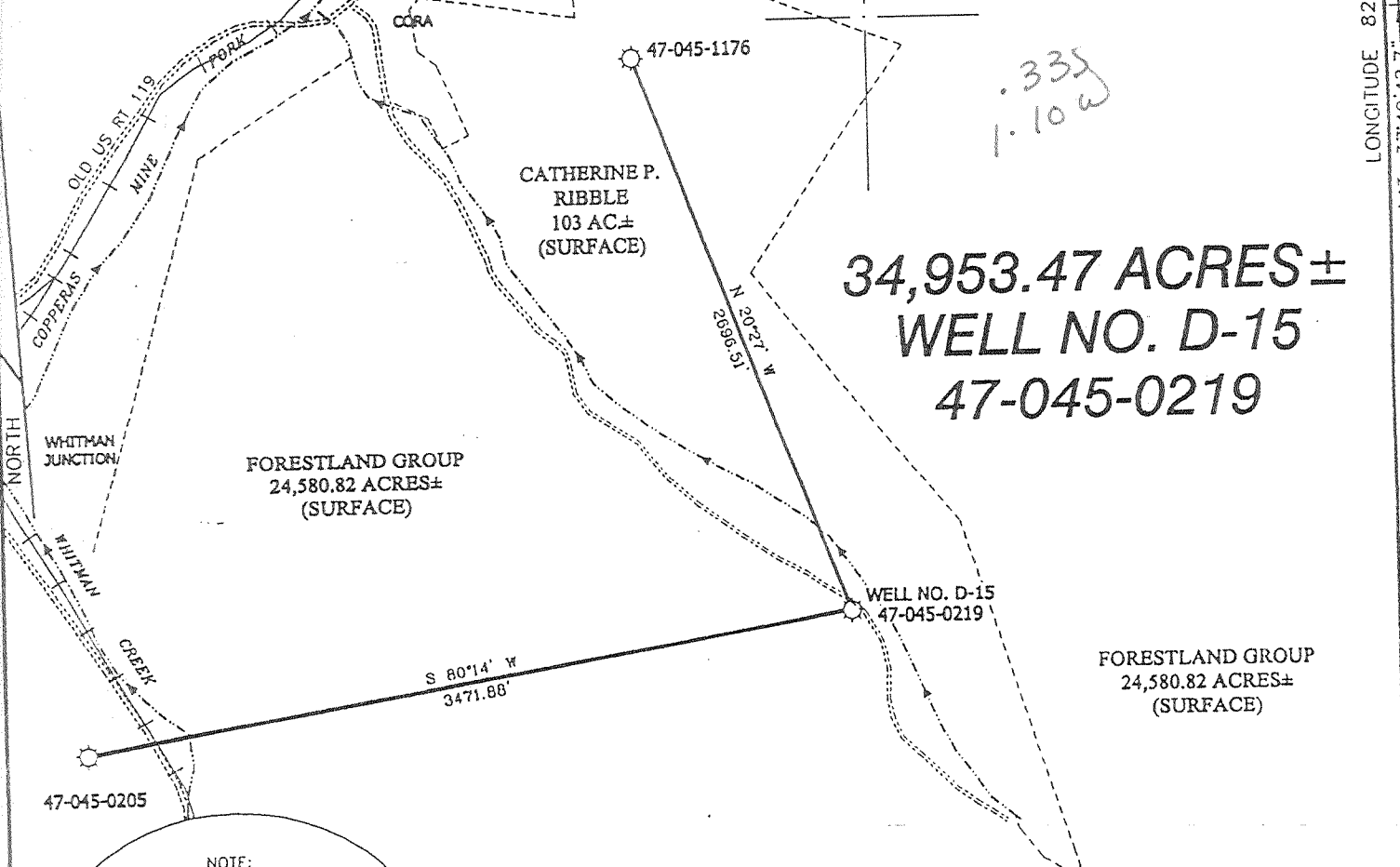
COUNTY NAME LOGAN PERMIT 0219 EC ANL

LONG. 82°01'11.9"

LATITUDE 37°50'00"

LONGITUDE 82°00'00"  
LAT. 37°49'42.7"

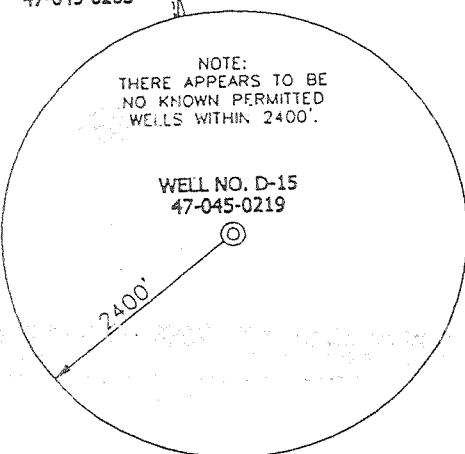
# ISLAND CREEK COAL COMPANY LEASE



**34,953.47 ACRES±  
WELL NO. D-15  
47-045-0219**

FORESTLAND GROUP  
24,580.82 ACRES±  
(SURFACE)

FORESTLAND GROUP  
24,580.82 ACRES±  
(SURFACE)



WELL NO. D-15  
STATE PLANE  
COORDINATES  
  
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(E) 1,705,413

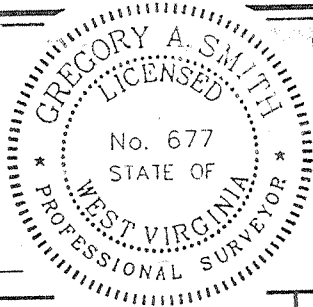
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 STATE COUNTY PERMIT

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 DIVISION OF ENVIRONMENTAL PROTECTION  
 OFFICE OF OIL AND GAS



WELL TYPE : OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL  IF "GAS" PRODUCTION  STORAGE  DEEP  SHALLOW

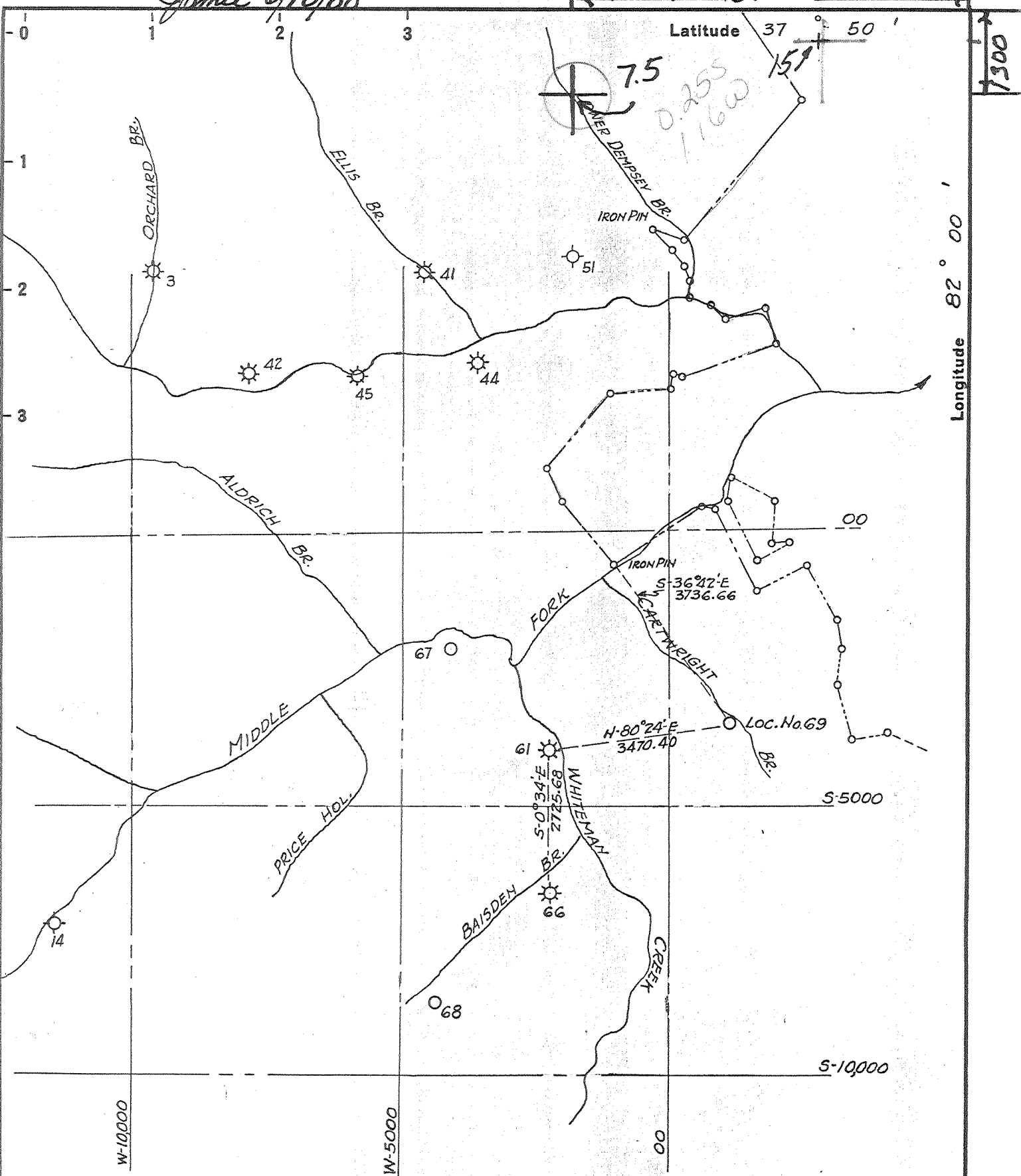
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 PHYSICAL CHANGE IN WELL (SPECIFY) FRAC BEREA AND TARGET FORMATION BEREA  
 COMINGLE ALL ZONES ESTIMATED DEPTH 2850 - 47750'

WELL OPERATOR BLAZER ENERGY CORPORATION DESIGNATED AGENT RICHARD SMELTZER  
 ADDRESS P.O. BOX 2347 CHARLESTON, WV 25328 ADDRESS P.O. BOX 2347 CHARLESTON, WV 25328

COUNTY NAME LOGAN  
 PERMIT 2195

Janie 6/10/88

6200



New Location..   
 Drill Deeper.....  - 6/13/88  
 Abandonment.....

ISLAND CREEK COAL CO. COORDINATES  
 S-3497.21 E-1161.87

Company OXY USA, INC. 3072  
 P.O. Box 873-Charleston, WVa. 25323  
 Address Surface: Georgia Pacific Co.  
 Farm ISLAND CREEK COAL CO.  
Georgia Pacific.  
 Tract Acres 34,953.47 Lease No. C-2448  
 Well (Farm) No. 69 Serial No. \_\_\_\_\_  
 Elevation (Spirit Level) 1033.77 Holden 7.5  
 Quadrangle HOLDEN -7- 5 024 W119  
 County LOGAN District LOGAN 2  
 Engineer C.A. Branham  
 Engineer's Registration No. 683  
 File No. \_\_\_\_\_ Drawing No. W/3/49  
 Date 2/3/49 Scale 1"=2400'

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

WELL LOCATION MAP  
 FILE NO. LOG-219-DD

+ Denotes location of well on United States Topographic Maps, scale 1 to 62,500, latitude and longitude lines being represented by border lines as shown. JUN 21 1988  
 - Denotes one inch spaces on border line of original tracing. 47-045

OWOOD-DEEP WELL 6 to Holden-Logan-Diggs (279)  
 11000' Dev. Shale



WEST VIRGINIA DEPARTMENT OF MINES  
OIL & GAS DIVISION  
W E L L R E C O R D

Permit No. Log 219  
Holden Quad.

*gas* Oil Well  
casing & tubing

Company	Columbian Carbon Co.	133/8 14" Same 48#
Address	Box 873, Charleston 23, W.Va.	Island Creek Coal Co. A 34,953.47 10 3/4 32# 468' 2 "
Farm		Cartwright Branch 8 1/2 24# 1666' 10 Pld.
Location		69-GW-1118 Elev. 1033.77 G 7 23# 2069' 10 Same
Well No.	Logan Logan County	2 3/8 4.6# 2876' 11 "
District	Island Creek Coal Co. Quaranty Bank Bldg.	with 2" cage
Surface	Huntington, W.Va.	
Mineral	Same	Midget B.H. Backer
Commenced	2-17-49	7" size
Completed	4-17-49	Depth 2066' SLM
Date shot	4-19-49	Depth 2861 SLM to 2825' SLM
Open flow	with 250# 80% Atlas Gelatin	Coal at 56' 24";
Volume	36/10ths W in 1"	168' 24"; 287' 36"
Rock Pressure	63,230 C.F.	385' 36"; 441' 48"
Oil	164 lbs. 48 hrs.	
Fresh Water	4 bbls. daily	
Salt Water	441.45' 1 blr. per hr.	
	1265'-70' H.F.; 1862' 3--8" blr. per hr.	

Yellow Clay	0	6	Little Lime	*2045 DLM	1994	2042
Sand	6	56	Pencil Cave	*2047 SLM	2042	* 2045
Coal	56	58	Big Lime	2064DLM-2006SLM	2045 DLM	
Sand	58	90			2047 SLM	2274
Slate	90	168	Big Injun Sand		2274	2305
Coal	168	170	Slate & Shells		2305	2783
Slate	170	287	Brown Shale		2783	DLM2811
Coal	287	290				SLM2822
Sand	290	385	Berea Sand	DLM	2811	
Coal	385	388		SLM	2822	DLM 2833
Sand	388	441				SLM 2844
Coal	441	445	Lime	DLM	2833	
Slate	445	480		SLM	2844	DLM 2846
Sand 470'DLM-469' SLM	480	501				SLM 2857
Slate	501	545	Slate	DLM	2846	
Sand	545	583		SLM	2857	SLM 2881
Slate	583	590	Total Depth			SLM 2881
Sand	599	604	Pays;			
Slate	604	660	Oil 2842-58			
Sand	660	685	Gas 2842-45 2/10 W 1" 15 M			
Slate	685	690	2855-58 6/10 W 1" 26 M			
Sand	690	703	Gas 2144' show			
Slate	703	762	Gas 2222-29 95/10 W 2" 411M			
Lime	762	790	Blew down to 4/10 W 1" , 21,060 C.F.			
Slate	790	800	and then exhausted			
Sand	800	857	Gas 2815' show			
Slate	857	873				
Sand	873	1034	CEMENT RECORD:			
Slate	1034	1059	2-25-49 10 3/4" casing- ran 105 sacks of			
Sand	1059	1147	cement. Pumped plug to 310 SLM , casing			
Slate	1147	1163	froze 5' off bottom. 159' cement left in			
Sand	1163	1168	casing.			
Slate	1168	1237				
Sand	1237	1397	3-23-49 .. 8 5/8" casing. ran 19 sacks of			
Slate	1397	1425	aquagel mixed 6%. Pumped plug to 1620'.			
Sand	1425	1560	Circulation and returns.			
Slate	1560	1575				
Lime	1575	1590	4-1-49 7" casing- ran 15 sacks of aquagel			
Slate	1590	1600	mixed 6%. Pumped plug to 1890'. Cir-			
Red Rock	1600	1615	ulation and returns.			
Lime	1615	1624				
Red Rock	1624	1635	C.C.Co.Crew			
Slate	1635	1648				
Lime 1652'DLM-1662'SLM	1648	1664				
Red Rock	1664	1672				
Slate & Shells	1672	1800				
Sand	1800	1865				
Slate	1865	1994				

WR  
**RECEIVED**  
JAN 30 1989

13-Jun-88  
API # 47- 45-00219 D

State of West Virginia  
DEPARTMENT OF ENERGY  
Division of Oil and Gas

DIVISION OF OIL & GAS  
DEPARTMENT OF ENERGY

Well Operator's Report of Well Work

Farm name: GEORGIA PACIFIC CO. Operator Well No.: 69 (GW-1118)

LOCATION: Elevation: 1033.77 Quadrangle: HOLDEN

District: ISLAND CREEK County: LOGAN  
Latitude: 1300 Feet South of 37 Des. 50Min. 0 Sec.  
Longitude: 6200 Feet West of 82 Des. 0 Min. 0 Sec.

Company: OXY USA, INC.  
P.O. BOX 873  
CHARLESTON, WV

Asent: DELBERT G. OLIVER

Inspector: ARTHUR ST. CLAIR  
Permit Issued: 06/13/88  
Well work Commenced: 9-24-88  
Well work Completed: 1-12-89  
Verbal Plussings  
Permission granted on:  
Rotary  Cable \_\_\_\_\_ Ris  
Total Depth (feet) 4750'  
Fresh water depths (ft) 441'-445'

Salt water depths (ft) 1265'-1270',  
1862'

Is coal being mined in area (Y/N)? Y  
Coal Depths (ft): 56', 169', 287', 385',  
441'

Size	Existing	Left	Cement
Casings	Used in	Left	Cement
&			Fill Up
Tubing	Drillings	in Well	Cu. Ft.
Conductor	Existing		
13.375"	14'	14'	
Fresh Wtr	Existing		105 sx
10.75"	468'	468'	Cement
Intermediate	Existing		15 sx
7"	2070'	2070'	Aquagel
Production			TOC
4.5"	4728'	4728'	2095'
Tubing			
2.375"		4665'	

OPEN FLOW DATA

Lower

Producing formation Rhinestreet, Huron, Devonian Pay zone depth (ft) 2985' to 4683'  
Gas: Initial open flow 180 MCF/d Oil: Initial open flow \_\_\_\_\_ Bbl/d  
Final open flow 175 MCF/d Final open flow \_\_\_\_\_ Bbl/d  
Time of open flow between initial and final tests 24 Hours  
Static rock Pressure 240 psis (surface pressure) after 66 Hours

Second producing formation \_\_\_\_\_ Pay zone depth (ft) \_\_\_\_\_  
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 \_\_\_\_\_ psis (surface pressure) after \_\_\_\_\_ 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.

Delbert G. Oliver, Appalachian Project Manager

For: OXY USA, INC.

By: Delbert G. Oliver  
Date: Jan 24, 1989

FEB 3 1989

7184

Island Creek A-69:

2881 to 4750'

Details of perforated intervals, fracturing or stimulating, physical change, etc.:

- Rhinestreet: 4514' to 4683' with 107 holes. Fracture stimulated with 230,000 lbs of 20-40 sand in 658 BW and 1,350,000 SCF of N2.
- Lower Huron: 3863' to 4195.5' with 246 holes. Fracture stimulated with 260,000 lbs of 20-40 sand in 729 BW and 1,205 MCF of N2.
- Devonian: 2985' to 3405' with 71 holes. Fracture stimulated with 51,509 lbs of 20-40 sand in 130 BW and 369 MCF of N2.

WELL LOG: (Note: Well was deepened from 2881 to 4750').

<u>Formation</u>	<u>Top (Ft)</u>	<u>Bottom (Ft)</u>
Devonian	<del>2881</del> <sup>2846</sup>	3861
Lower Huron	3861	4202
Java	4202	4512
Rhinestreet	4512	4714
Marcellus	4714	4741
Onondaga	4741	4750

**RECEIVED**  
JAN 30 1989  
DIVISION OF OIL & GAS  
DEPARTMENT OF ENERGY

7184

**STATE OF WEST VIRGINIA**  
**DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS**  
**WELL WORK PERMIT APPLICATION**

- 1) Well Operator: <sup>3072</sup> OXY USA INC. 36205, 5, 401
- 2) Operator's Well Number: Island Creek A-69, GW-1118 3) Elevation: 1033.77
- 4) Well type: (a) Oil  / or Gas  /  
 (b) If Gas: Production  / Underground Storage  /  
 Deep  / Shallow  /
- 5) Proposed Target Formation(s): Devonian Shale <sup>441</sup>
- 6) Proposed Total Depth: 4900' feet
- 7) Approximate fresh water strata depths: 441-45'
- 8) Approximate salt water depths: 1265-70', 1862'
- 9) Approximate coal seam depths: 56', 168', 287', 385', 441'
- 10) Does land contain coal seams tributary to active mine? Yes  / No  /
- 11) Proposed Well Work: DEVONIAN SHALE DEEPENING
- 12) \*NEW TUBULARS  
 \*\*TUBING TO BE PULLED CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS		FOOTAGE INTERVALS		CEMENT	
	Size	Grade	Weight per ft.	For drilling		Left in well
Conductor	13 3/8		48	14	14	
Fresh Water	10 3/4		33	468	468	105 sx cmt
Coal	8 5/8		24	1666	0	19 sx Aquagel
Intermediate	7		23	2070	2070	15 sx Aquagel
* Production	4 1/2	K55	11.6	4900	4900	300 cu ft
* Tubing	2 3/8	NUE	4.6	4900	4900	
** Liners/TUBING	2 3/8		4.6	2876		

**RECEIVED**  
 JUN 08 1988

PACKERS : Kind MBH  
 Sizes 7"  
 Depths set 2066'

DIVISION OF OIL & GAS  
 DEPARTMENT OF ENERGY

For Division of Oil and Gas Use Only

Fee(s) paid: 7 Well Work Permit 7 Reclamation Fund 7 WPCP 7  
 Plat 7 WW-9 7 WW-2B 7 Bond 505 blank Agent 7  
 (Type)

7/84  
 30071  
 7



**RECEIVED**  
JUN 08 1988

1) Date: May 27, 1988  
2) Operator's well number  
Island Creek A-69, GW-1118  
3) API Well No: 47 - 045 - 0219-DD  
State - County - Permit

**DIVISION OF OIL & GAS  
DEPARTMENT OF ENERGY**

**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 Georgia Pacific Corporation  
Address 133 Peachtree St. NE  
Atlanta, GA 30348  
(b) Name Attn: W. C. Covington  
Address \_\_\_\_\_  
(c) Name \_\_\_\_\_  
Address \_\_\_\_\_  
6) Inspector Arthur St. Clair  
Address P. O. Box 468  
Benton, WV 24818  
Telephone (304)-732-6217 (436-4527)

5) (a) Coal Operator:  
Name N/A  
Address \_\_\_\_\_  
(b) Coal Owner(s) with Declaration  
Name Island Creek Corporation  
Address Island Creek Division  
P. O. Box 840, Holden, WV 25625  
Name Attn: Jerry Workman, Mgr Engr.  
Address \_\_\_\_\_  
(c) Coal Lessee with Declaration  
Name N/A  
Address \_\_\_\_\_

**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 4 on the above named parties, by:

- \_\_\_\_\_ Personal Service (Affidavit attached)
- x 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.

Well Operator OXY USA Inc.  
By: Delbert G. Oliver *[Signature]*  
Its: Project Manager  
Address P. O. Box 873  
Charleston, WV 25323  
Telephone (304) 344-8383

Subscribed and sworn before me this 24<sup>th</sup> day of May, 1988

Cherrie S. Atensbury Commissioner Notary Public  
My commission expires APRIL 9, 1989