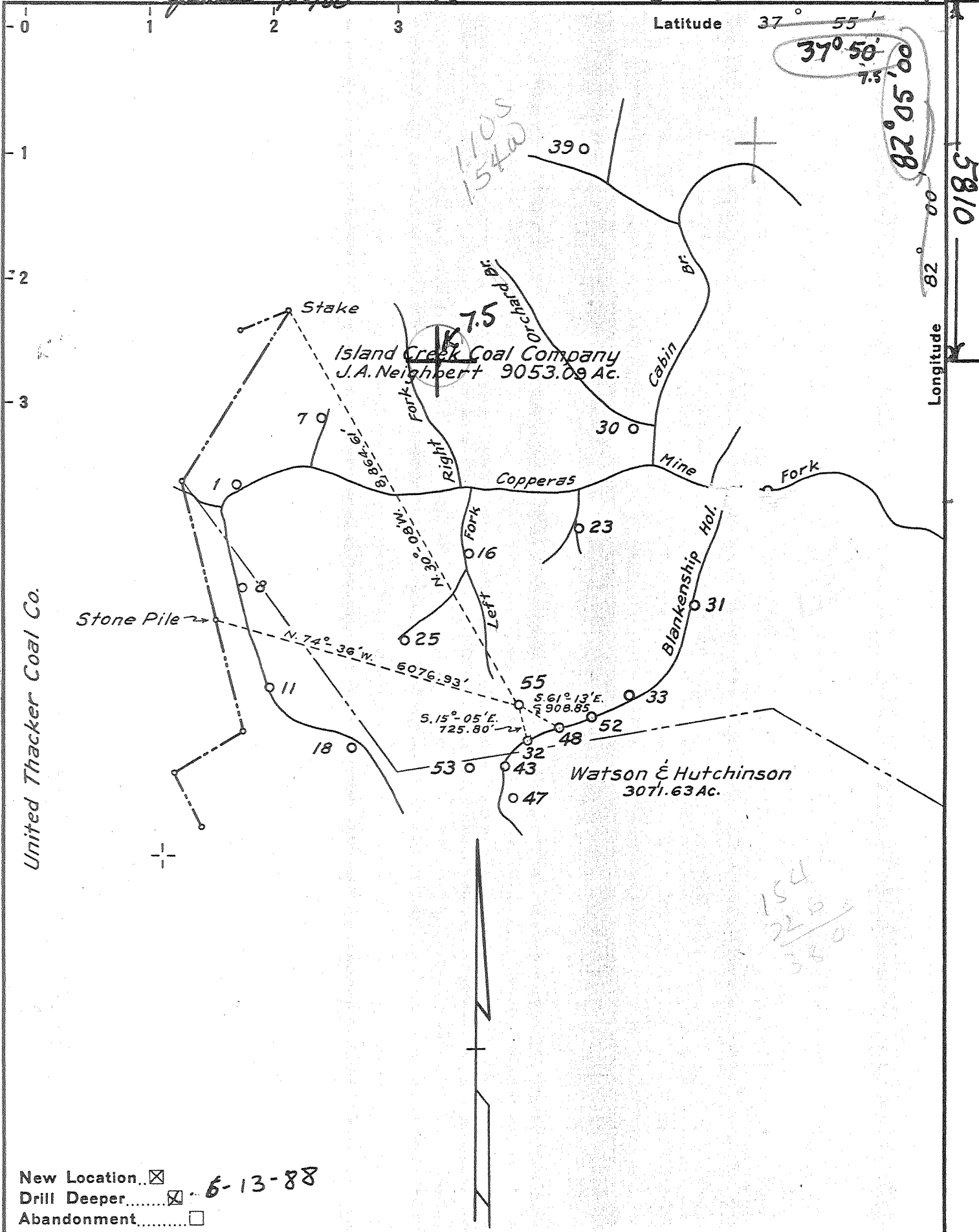


Jamie 6/10/88

8200



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

Company OXY USA, INC. 3072  
 P.O. Box 873-Charleston, W.Va. 25323  
 Address Surface: Georgia Pacific Corp.  
 Farm Island Creek Coal Co.  
 Tract \_\_\_\_\_ Acres 9053.09 Lease No. C-2448  
 Well (Farm) No. 55 Serial No. \_\_\_\_\_  
 Elevation (Spirit Level) Surf. 1244.77  
 Quadrangle Holden-8-S.E. Holden 7.5  
 County Logan District Logan 2  
 Engineer C.A. Branham  
 Engineer's Registration No. 683  
 File No. \_\_\_\_\_ Drawing No. \_\_\_\_\_  
 Date 11-3-47 Scale 1"=2400'

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

WELL LOCATION MAP  
 FILE NO. LOG-191-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.

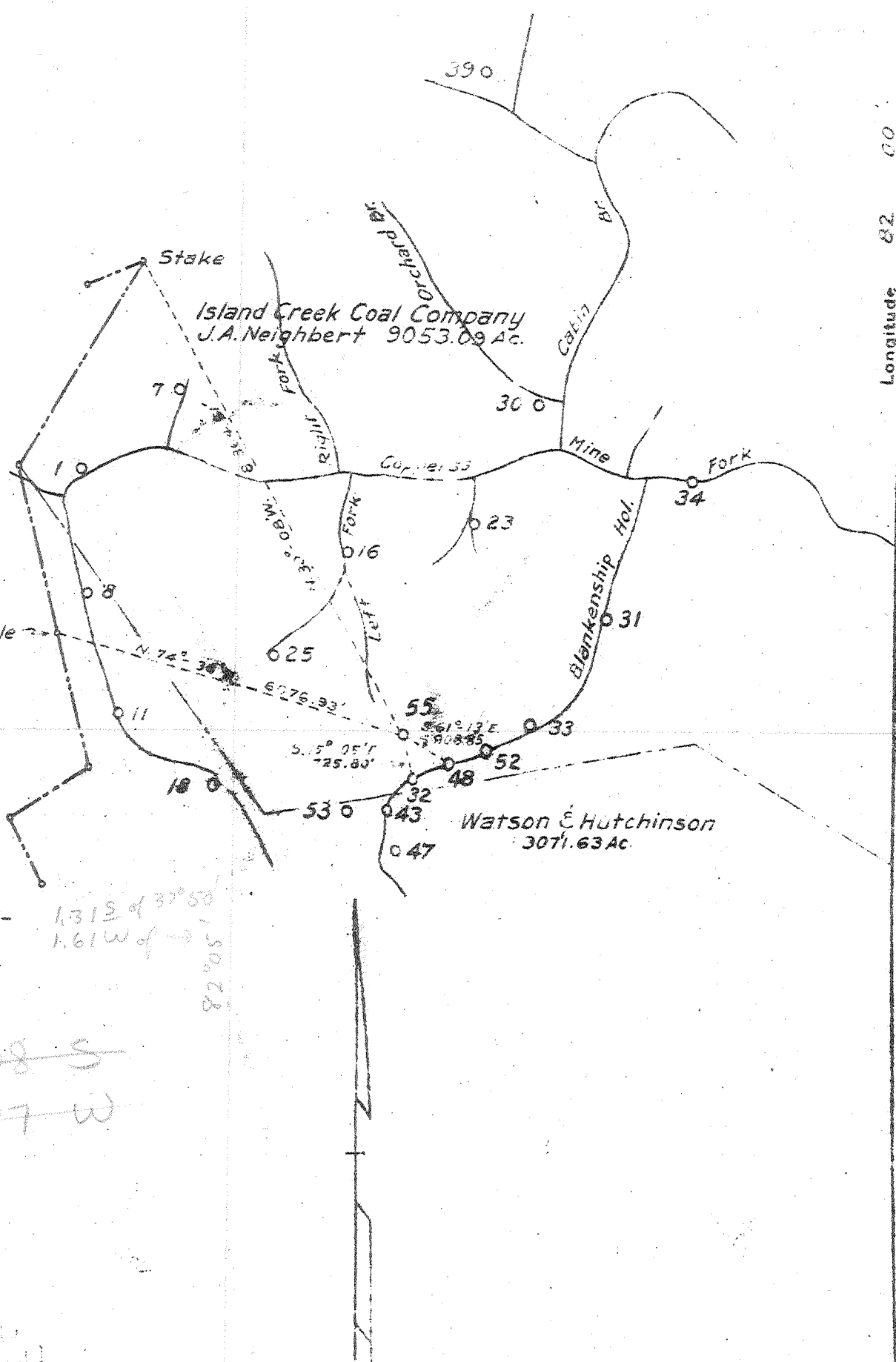
- Denotes one inch spaces on border line of original tracing.

JUN 21 1988

47-045 DDD

OWDO DEEP WELL 3-3 Island Creek (289) Dev. sh. L. Huron 13  
 4710' Dev. Shale

United Thacker Coal Co.



+ 1.31 S of 37° 50'  
 1.61 W of →  
 82° 05'

~~708 S~~  
~~617 W~~

New Location X  
 Drill Deeper  
 Abandonment

Company Columbian Carbon Co.  
 Address Box 873 Charleston, W. Va.  
 Farm Island Creek Coal Co.  
 Tract \_\_\_\_\_ Acres 9053.09 Lease No. C-2448  
 Well (Farm) No. 55 Serial No. \_\_\_\_\_  
 Elevation (Spirit Level) Surf. 1244.77  
 Quadrangle Holden-8-S.E. S.C.  
 County Logan District Logan  
 Engineer C.A. Branham  
 Engineer's Registration No. 683  
 File No. \_\_\_\_\_ Drawing No. \_\_\_\_\_  
 Date 11-3-47 Scale 1"=2400'

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

WELL LOCATION MAP  
 FILE NO. LOG-191

+ 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

- Denotes one inch spaces on border line of original tracing

6-6-219

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

Permit No. Log 191		Gas Well
Holden Quad.		casing & tubing
Company	Columbian Carbon Company	
Address	Box 873, Charleston 23, W.Va.	13 3/8 16'7 Same
Farm	Island Creek Coal Co. A 34.953.47	10 1/2 32# 750'2 Same
Location	Blankenship Hollow	8 1/2 24# 2045'8 Same
Well No.	55- GW 988 Elev. 11244.7 G	7.23# 2223'1 Same
District	Logan Logan County	
Surface	Island Creek Coal Co.	No Packer
	Guananty Bank Bldg., Huntington, W.Va.	Coal at 435' 36"
Mineral	Same	571' 48"; 706' 48"
Commenced	12-15-47	
Completed	3-24-48	
Not shot		
Open flow	48/10ths M in 4"	
Volume	3984 MCF	
Rock Pressure	220 lbs. 24 hrs.	
Oil	Made 10 bbls. 1st 24 hrs.	
Fresh Water	105' 1-13" blr. per hr; 676' 2-13" blr. per hr.	
Salt Water	1465' 1 blr. per hr; 1650' 2 blrs. per hr. 1990' H.F.	

Sand	0	71	Slate	2115	2120
Slate	71	120	Lime	2120	2130
Lime	120	124	Sand	2130	2135
Sand	124	167	Slate	2135	2155
Slate	167	187	Lime	2155	2187
Sand	187	210	Pencil	2187	2191
Slate	210	225	Big Lime 2214 DLM-2206 SLM	2191	2336
Sand	225	278			
Slate	278	305	Total Depth		2336
Sand	305	375	PAYS:		
Slate	375	407	Gas 2328 10/10 M 4" 1,967 M		
Sand	407	435	Gas 2333 41/10 M 4" 3984 M		
Coal	435	438	Oil 2333 10 bbls. of oil		
Sand	438	495			
Slate	495	538	CEMENT RECORD:		
Black Lime	538	547	1-5-48 10 1/2" casing, cemented w/200 bags		
Sand	547	571	cement followed w/ plug. Pumped plug		
Coal	571	575	to 324' SLM. Circulation, no returns.		
Gray Lime	575	586			
Slate	586	591	3-1-48 8 5/8" casing- ran 24 bags		
Sand	591	634	aquagel - no returns O.K.		
Slate	634	675			
Sand	675	706	3-9-48 7" casing- ran 16 bags aquagel		
Coal	706	710	mixed 6%. Displaced w/88 bbls. water.		
Slate & Shells	710	745	Cemented w/10 sacks cement run in dump		
Lime Shells 740 DLM-743 SLM 745	745	757	bailer.		
Slate	757	810			
Sand	810	880	Columbian Carbon Company Crew		
Slate & Shells	880	1037			
Sand	1037	1070			
Slate & Shells	1070	1107			
Sand	1107	1363			
Slate & Shells	1363	1418			
Salt Sand	1418	1740			
Slate	1740	1742			
Sand	1742	1763			
Slate	1763	1766			
Sand	1766	1775			
Slate & Shells	1775	1791			
Red Rock	1791	1806			
Lime	1806	1835			
Slate & Shells	1835	1890			
Red Lime	1890	1908			
Slate	1908	1925			
Lime	1925	1936			
White Slate	1936	1953			
Sand	1953	2070			
Slate 2028 SLM-2023 DLM	2070	2100			
Lime	2100	2115			

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

Well Operator: 3072 OXY USA INC. 36205, 5, 401

Operator's Well Number: Island Creek A-55, GW 988 3) Elevation: 1244.77

Well type: (a) Oil  / or Gas  /  
(b) - If Gas: Production  / Underground Storage   
Deep  / Shallow

Proposed Target Formation(s): 441 Devonian Shale

Proposed Total Depth: 4710 feet

Approximate fresh water strata depths: 109', 676'

Approximate salt water depths: 1465', 1650', 1990'

Approximate coal seam depths: 435', 571', 706'

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

1) Proposed Well Work:

2) DEVONIAN SHALE DEEPENING

\*NEW TUBULARS

CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT
	Size	Grade	Weight per ft.	For drilling	Left in well	Fill-up (cu. ft.)
Conductor	13 3/8			16	16	
Fresh Water	10 3/4		33	750	750	280 sx cmt
Coal	8 5/8		24	2045	2045	24 sx Aquagel
Intermediate	7		23	2223	2223	16 sx Aquagel
* Production	4 1/2	K-55	11.6	4710	4710	300 cu ft
* Tubing	2 3/8	NUE	4.6	4710	4710	
Liners						

RECEIVED  
JUN 18 1988

PACKERS : Kind \_\_\_\_\_  
Sizes \_\_\_\_\_  
Depths set \_\_\_\_\_

For Division of Oil and Gas Use Only

DIVISION OF OIL & GAS  
DEPARTMENT OF ENERGY

Fee(s) paid: 30071 Well Work Permit 30071 Reclamation Fund 30071 WPCP  
Plat 30071 WW-9 30071 WW-2B 30071 Bond 50 Blanket Agent 30071  
(Type)

**RECEIVED**  
JUN 10 1988

1) Date: May 27, 1988  
2) Operator's well number  
Island Creek A-55, GW-988  
3) API Well No: 47 - 045 - 0191-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 \_\_\_\_\_

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 \_\_\_\_\_

6) Inspector Arthur St Clair  
Address P. O. Box 468  
Benton, WV 24818  
Telephone (304)- 723-6223 (436-4507)

(c) Coal Lessee with Declaration  
Name \_\_\_\_\_  
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 *San Baylan*  
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

Chas. S. Steensburg Commissioner Notary Public  
My commission expires April 9, 1989

RECEIVED  
SEP 14 1989

API # 47- 45-00191 D

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

DIVISION OF OIL & GAS Well Operator's Report of Well Work  
DEPARTMENT OF ENERGY  
Farm name: GEORGIA PACIFIC CORP. Operator Well No.: D-19 GW-988

LOCATION: Elevation: 1244.77 Quadrangle: HOLDEN

District: ISLAND CREEK County: LOGAN  
Latitude: 5810 Feet South of 37 Deg. 50Min. 0 Sec.  
Longitude: 8200 Feet West of 82 Deg. 5 Min. 0 Sec.

Company: OXY USA, INC.  
P.O. BOX 873  
CHARLESTON, WV 25323-0873

Agent: DELBERT G. OLIVER

Inspector: TIM BENNETT  
Permit Issued: 06/13/88  
Well work Commenced: 10-31-88  
Well work Completed: 8-29-89  
Verbal Plugging  
Permission granted on: \_\_\_\_\_  
Rotary X Cable \_\_\_\_\_ Rig  
Total Depth (feet) 4746'  
Fresh water depths (ft) 105' & 676'

Salt water depths (ft) 1465', 1650' & 1990'

Is coal being mined in area (Y/N)? Y  
Coal Depths (ft): 435' (36"), 571' (48"), 706' (48").

Casing & Tubing	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
Size Fresh Wtr 10-3/4"	Existing 750'	750'	200 Sx
Coal 8-5/8"	Existing 2045'	2045'	24 Sx Aquagel
Intermediate 7"	Existing 2223'	2223'	10 sx
Production 4-1/2"	4726'	4726'	326 Cu Ft
Tubing 2-3/8"		4233'	

OPEN FLOW DATA

Producing formation LOWER HURON Pay zone depth (ft) 3956-4246'  
Gas: Initial open flow \_\_\_\_\_ MCF/d Oil: Initial open flow \_\_\_\_\_ Bbl/d  
Final open flow 18.5 MCF/d Final open flow \_\_\_\_\_ Bbl/d  
Time of open flow between initial and final tests 13-1/2 Hours  
Static rock Pressure 250 psig (surface pressure) after 50 Hours

Second producing formation NONE 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 \_\_\_\_\_ psig (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: 9-13-89

SEP 15 1989

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

FORMATION

LOWER HURON Perforated 3956-4246' (291 holes). Frac'd with 50,000# sand, 88 BLW, 292 MCF N<sub>2</sub>.

WELL LOG

<u>FORMATION</u>	<u>TOP (FT)</u>	<u>BOTTOM (FT)</u>
Big Injun	2346	2422
Shale	2422	2440
Weir	2440	2654
Shale	2654	2960
Sunbury	2960	2995
Berea	2995	3036
Upper Devonian Shale	3036	3952
Lower Huron	3952	4254
Java	4254	4531
Rhinestreet	4531	4700
Marcellus	4700	4732
Onondaga	4732	4746 (TOTAL DEPTH)

**RECEIVED**  
SEP 14 1989

DIVISION OF OIL & GAS  
DEPARTMENT OF ENERGY

4746 - new TD  
2336 - old TD  
2410 - new ftg = expl. ftg.

2817

SEP 15 1989