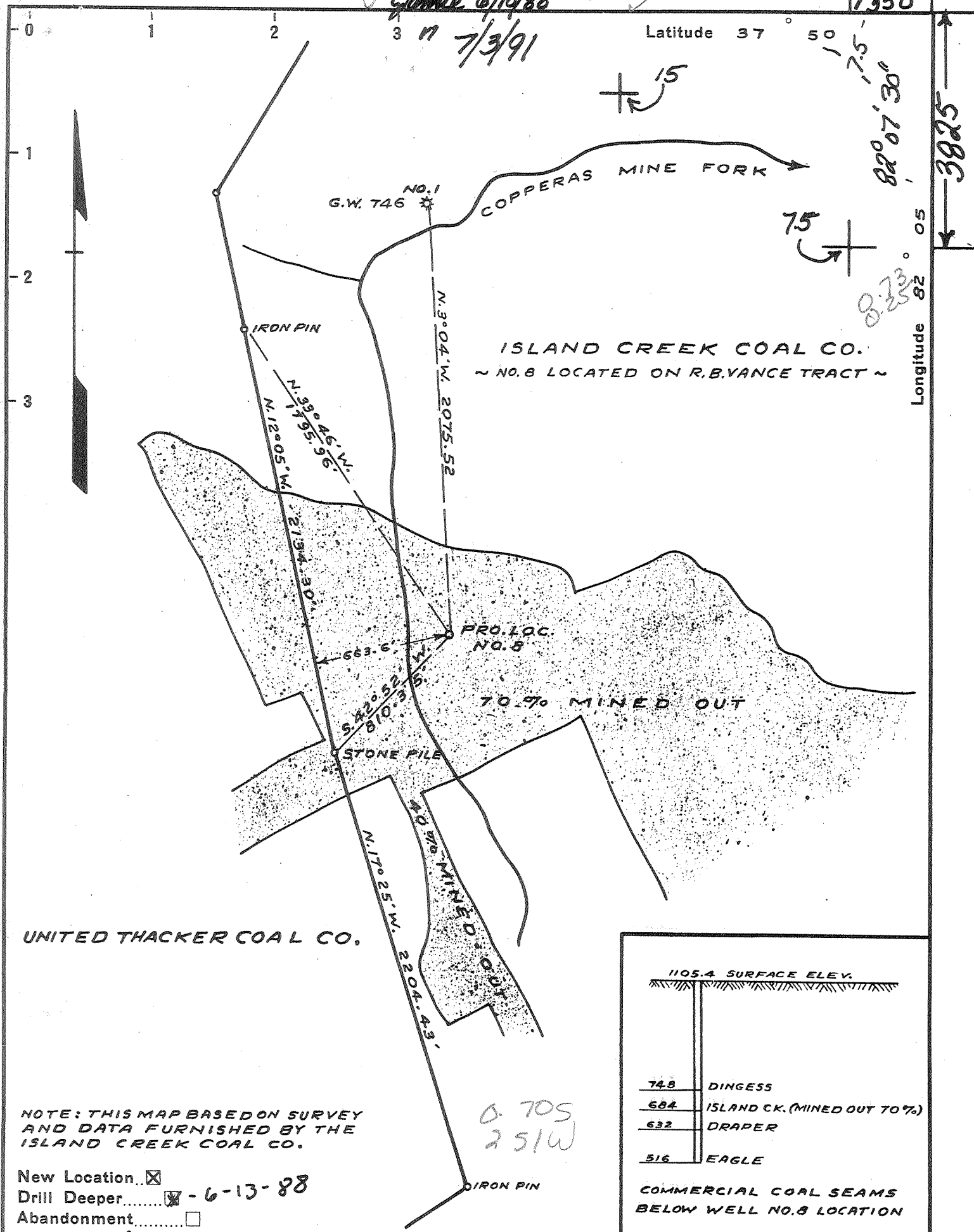


✓ *Done 6/10/88*  
 ✓ *7/3/91*

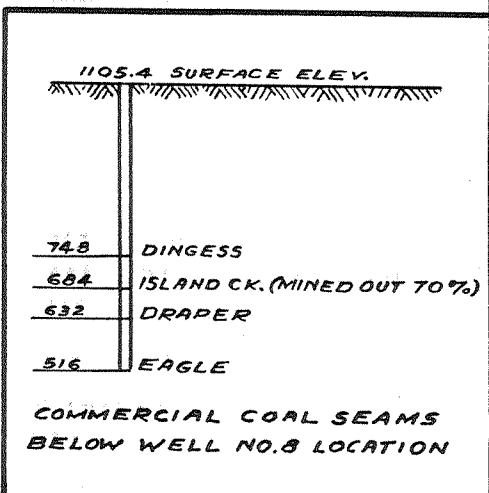
1350



UNITED THACKER COAL CO.

NOTE: THIS MAP BASED ON SURVEY AND DATA FURNISHED BY THE ISLAND CREEK COAL CO.

New Location   
 Drill Deeper  - 6-13-88  
 Abandonment



Company Ashland Exploration Inc. 43  
 Address PO Box 391, Ashland, N.Y. 41104  
 Farm ISLAND CREEK COAL CO.  
 Tract \_\_\_\_\_ Acres \_\_\_\_\_ Lease No. C-2448  
 Well (Farm) No. 8 Serial No. \_\_\_\_\_  
 Elevation (Spirit Level) 1105.4' MYRTLE 7.5  
 Quadrangle HOLDEN S.W. 8-524-208  
 County LOGAN District LOGAN 2  
 Engineer J. Sell  
 Engineer's Registration No. 772  
 File No. \_\_\_\_\_ Drawing No. 285  
 Date AUG. 17, 1944 Scale 1" = 600'

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

WELL LOCATION MAP  
 API No. 47-045-00114-7

+ 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.

JUL 08 1991

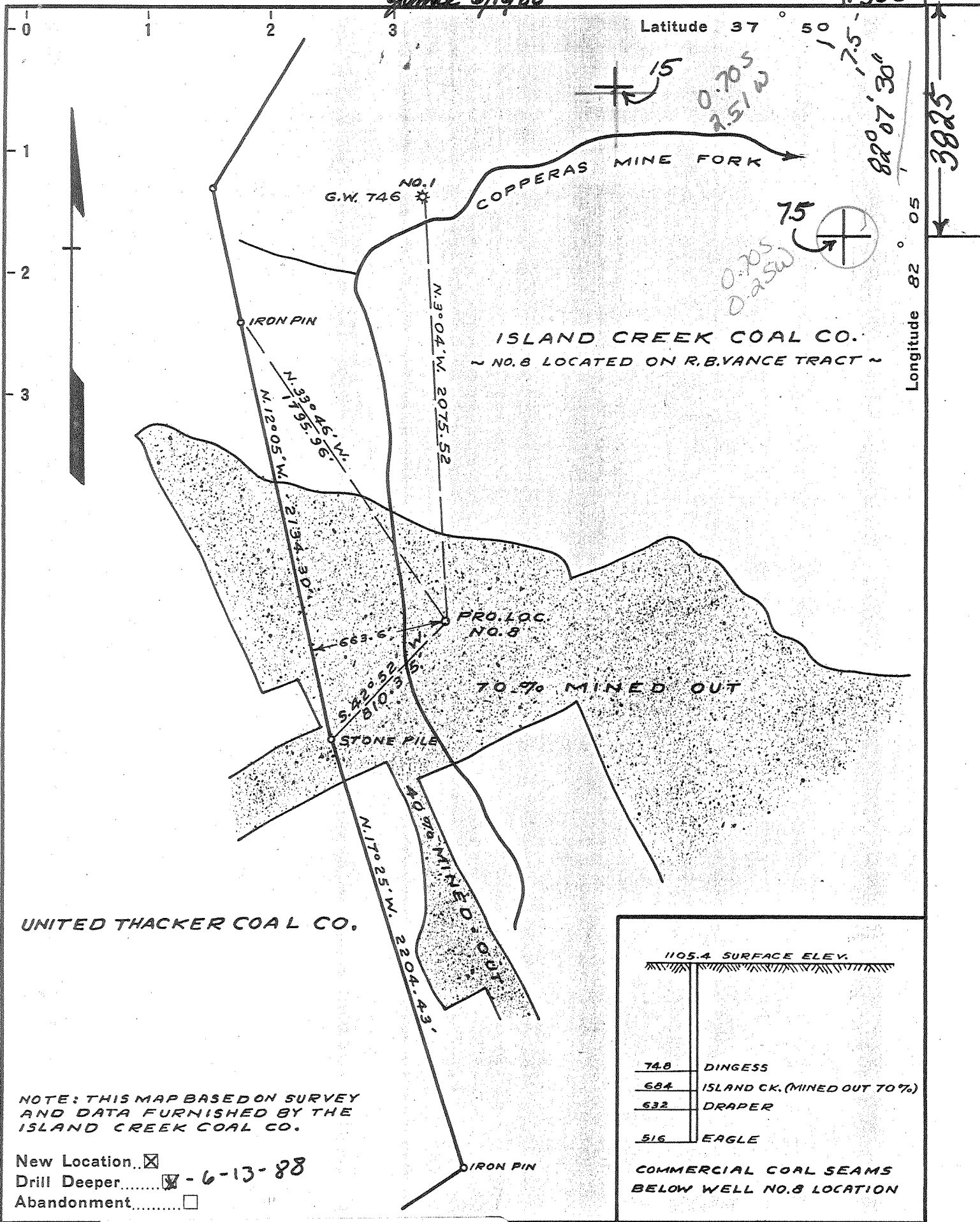
LOGAN 114

DEEP WELL 00W0 6-6 Island Creek (289)

Janie 6/10/88

1350

3825



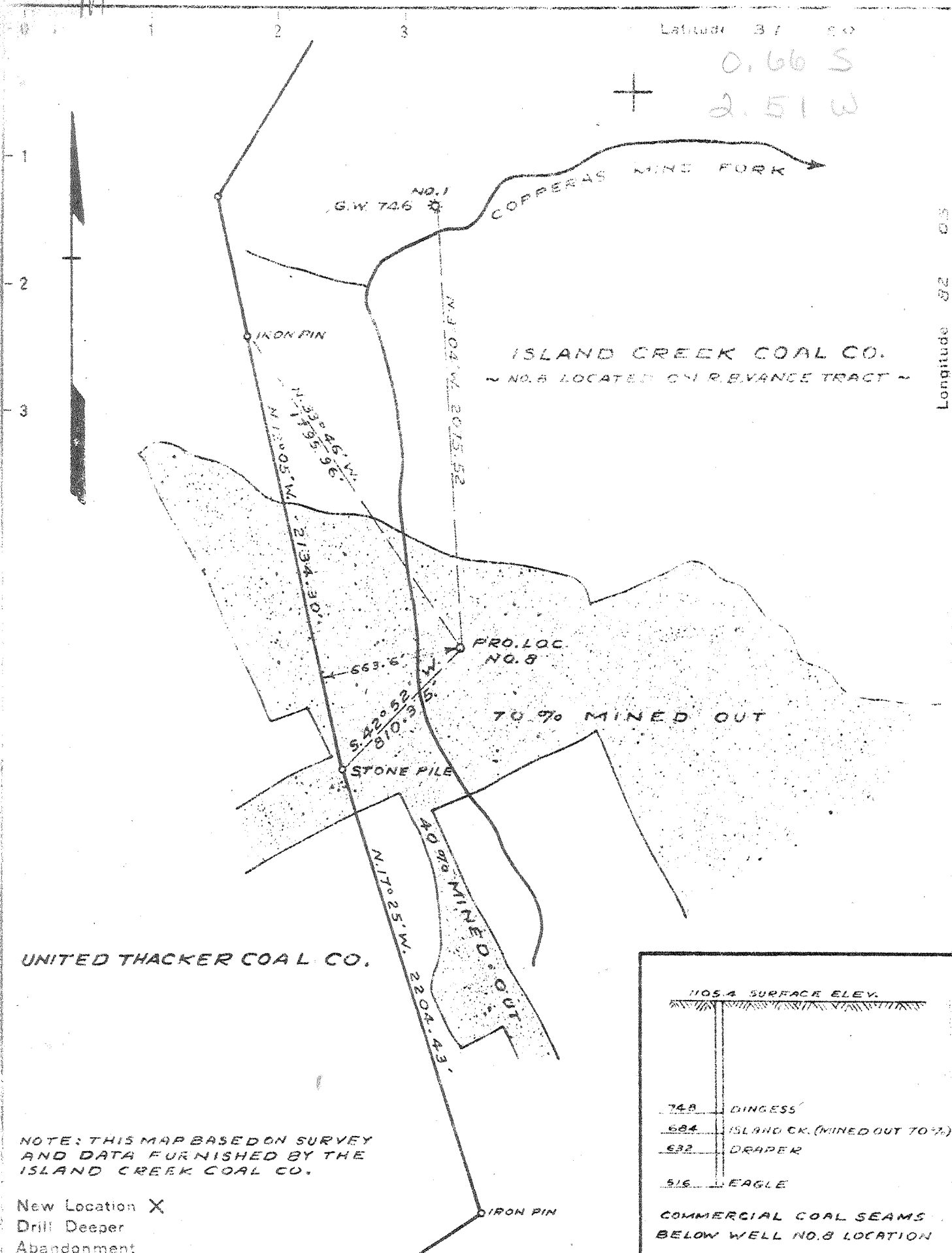
Company OXY USA, INC. 3072  
 Address P.o. Box 873-Charleston, wva 25323  
Surface: Georgia Pacific Corp.  
 Farm ISLAND CREEK COAL CO.  
 Tract \_\_\_\_\_ Acres \_\_\_\_\_ Lease No. C-2448  
 Well (Farm) No. 8 Serial No. \_\_\_\_\_  
 Elevation (Spirit Level) 1105.4' MYRTLE 7.5  
 Quadrangle HOLDEN S.W. 8-524-208  
 County LOGAN District LOGAN 2  
 Engineer J. M. Sell  
 Engineer's Registration No. 772  
 File No. \_\_\_\_\_ Drawing No. 285  
 Date AUG. 17, 1944 Scale 1" = 600'

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

WELL LOCATION MAP  
 FILE NO. LOG-114-00

+ 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



Company COLUMBIAN CARBON CO.  
 Address BOX 873 CHARLESTON W. VA.  
 Farm ISLAND CREEK COAL CO.  
 Tract \_\_\_\_\_ Acres \_\_\_\_\_ Lease No. C-2448  
 Well (Farm) No. 8 Serial No. \_\_\_\_\_  
 Elevation (Spirit Level) 1105.4'  
 Quadrangle HOLDEN S. 19 A-524-208  
 County LOGAN District LOGAN  
 Engineer J. M. Sell  
 Engineer's Registration No. 772  
 File No. \_\_\_\_\_ Drawing No. 285  
 Date AUG. 17, 1944 Scale 1" = 600'

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

WELL LOCATION MAP  
 FILE NO. LOG-114

\* 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 of original tract.

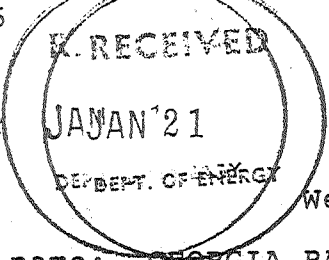
6-6 289

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

Permit No. Log 114		Gas Well
Holden S.W. Quad.		CASING & TUBING
Company	Columbian Carbon Company	
Address	Box 873, Charleston, 23, W.Va.	
Farm	Island Creek Coal Company Acres 30,380	
Location	Copperas Fork	16 27'3 27'3
Well No.	8 ( GW-765) Elev. 1106.7 DF	13 3/8 48# 471'11
District	Logan Logan County	131'7
Surface	Island Creek Coal Co., Guaranty Bank Bldg. Huntington, W.Va.	10 1/2 32.75 658'8 Sm.
Mineral	Same	8 1/2 24# 1682'9 Pld.
Commenced	9-2-44	7 23#
Completed	12-15-44	22# 2027'2 Same
Not shot		3 1/2 7.7 2211' 9 Same
Acidized	1000 gallons of acid	5 1/2 13# 138'5 Same
Volume	1, 525,000 C.F.	
Rock Pressure	555 lbs. 10 hrs.	Gas Anchor Packer
Fresh Water	109' 6-15" blr.; 136' H.F.; 140' H.F.	Size 7 x 3 1/2 x 5 1/2
	485-490' 4 blr. 1 hr.	Depth 2050'
Salt Water	1170' H.F.	

Coal at 27' 36"; 298' 24";  
418' 72"; 534' 60"

Surface	0	10	CEMENT RECORD:
Rock	10	22	
Slate	22	27	9-22-44 13 3/8" casing. Ran 25
Coal	27	30	sacks cement with shoe on bottom.
Sand	30	87	C.C.Co. Crew
Slate	87	95	
Hard Rock	95	120	9-28-44 10 1/2" casing. Ran 300
Slate	120	135	bags cement mixed with gelatin.
Sand	135	145	C.C.Co. Crew
Lime	145	165	
Slate	165	170	11-4-44 8 5/8" casing. Ran 23
Lime	170	175	sacks Gelatin mixed with 1 bag
Sand	175	244	Fibrotex. Good returns. C.C.Co.Crew
Slate	244	255	
Sand	255	298	12-5-44 7" casing. Ran 15 sacks
Coal <i>DINGESS</i>	298	300	aquafel and 1 bale Fibrotex.
Sand	300	328	Good returns. C.C. Co. Crew.
Slate	328	370	
Lime	370	400	
Sand	400	418	
Coal Mine <i>ISLAND CRK (COP GROVE)</i>	418	424	
Sand	424	446	
Slate	446	462	
Sand	462	490	
Slate	490	534	
Coal <i>EAGLE</i>	534	539	
Slate	539	647	
Sand	647	735	
Slate & Shells	735	880	
Sand	880	930	
Slate & Shells	930	950	
Sand	950	1210	
Slate	1210	1215	
Lime	1215	1239	
Maxon Sand	1239	1330	
Lime	1330	1336	
Sand	1336	1583	
Slate	1583	1585	
Lime	1585	1595	
Red Rock	1595	1615	
Lime	1615	1640	
Slate	1640	1658	
Red Rock	1658	1669	
Slate & Shells	1669	1983	
Big Lime	1983	2188 SLM	1st gas 2178' show
TOTAL DEPTH		2188 SLM	Gas pays: 2181-2186'



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

Reviewed TMG

Well Operator's Report of Well Work Recorded

Farm name: GEORGIA PACIFIC CORP. Operator Well No.: D-9 S-131171

LOCATION: Elevation: 1105.40 Quadrangle: HOLDEN

District: LOGAN County: LOGAN  
 Latitude: 3825 Feet South of 37 Deg. 50Min. 0 Sec.  
 Longitude 1350 Feet West of 82 Deg. 7 Min. 30 Sec.

Company: ASHLAND EXPLORATION, INC.  
P.O. BOX 391, A1-6  
ASHLAND, KY 41114-0391

Agent: FORREST BURKETT

Inspector: RICHARD CAMPBELL  
 Permit Issued: 07/05/91  
 Well work Commenced: 12/13/91  
 Well work Completed: 1/6/92  
 Verbal Plugging \_\_\_\_\_  
 Permission granted on: \_\_\_\_\_  
 Rotary \_\_\_\_\_ Cable \_\_\_\_\_ Rig \_\_\_\_\_  
 Total Depth (feet) \_\_\_\_\_  
 Fresh water depths (ft) \_\_\_\_\_  
 Salt water depths (ft) \_\_\_\_\_

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
2 3/8" @ 4012			

Is coal being mined in area (Y/N)? \_\_\_\_\_  
 Coal Depths (ft): \_\_\_\_\_

\* The well was purchased from Oxy by AEI.  
 This well had been drill deepened by Oxy but not completed.

OPEN FLOW DATA

Producing formation Dev. Shale/Berea Pay zone depth (ft) 2822-4013  
 Gas: Initial open flow -0- MCF/d Oil: Initial open flow -0- Bbl/d  
 Final open flow 489 MCF/d Final open flow -0- Bbl/d  
 Time of open flow between initial and final tests 3 Hours  
 Static rock Pressure 410# psig (surface pressure) after 72 Hours

Second producing formation -0- Pay zone depth (ft) -0-  
 Gas: Initial open flow -0- MCF/d Oil: Initial open flow -0- Bbl/d  
 Final open flow -0- MCF/d Final open flow -0- Bbl/d  
 Time of open flow between initial and final tests -0- Hours  
 Static rock Pressure -0- psig (surface pressure) after -0- 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: ASHLAND EXPLORATION, INC.

By: James L. Stephens James L. Stephens, Eng. Tech  
 Date: 1/16/92

After purchase from Oxy by Ashland Exploration the well was completed. The following information was obtained while AEI completed the Devonian Shale zones. The drilling information can be obtained from a prior WR-35 dated November 29, 1989, under the permit number 47-045-0114-D.

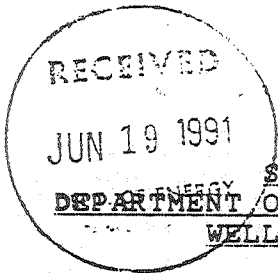
Perf L. Dev. Shale 23H/3740-4013. N<sub>2</sub> frac using 500 gal. 7 1/2% HCL fe acid, 1,005,000 scf N<sub>2</sub> @ 101,417 scf/min. BD @ 2960#, ATP 4058#, MTP 4188#, ISIP 1926#.

Perf U. Dev. Shale and Berea 22H/2822-3298. N<sub>2</sub> frac using 500 gal. 7 1/2% fe acid, 1,006,000 scf N<sub>2</sub> @ 98365 scf/min. BD @ 2836#, ATP 4084#, MTP 4278#, ISIP 1989#.

NO CRAFT RECORDS, NO T.D.

See 404 3739-3762  
313 3762-4012  
302 4012-4013

12/27



045-0114- Frac  
Issued 07/05/91  
Page 1 of 2  
Expired 07/05/93

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

- 1) Well Operator: Ashland Exploration, Inc. <sup>0043</sup> 2750 (2) 401  
Island Creek Coal Co.
- 2) Operator's Well Number: D-9, Serial No. 131171 3) Elevation: 1105.4'
- 4) Well type: (a) Oil   / or Gas X/  
(b) If Gas: Production X/ Underground Storage   /  
Deep   / Shallow X/  
441
- 5) Proposed Target Formation(s): Devonian Shale
- 6) Proposed Total Depth: Original - 2188' feet New TD - 4498'
- 7) Approximate fresh water strata depths: N/A
- 8) Approximate salt water depths: N/A
- 9) Approximate coal seam depths: N/A
- 10) Does land contain coal seams tributary to active mine? Yes   / No X/
- 11) Proposed Well Work: The well was drilled deeper on June 13, 1988, but was not completed. It is proposed to perforate and stimulate the Devonian Shale and Berea Sand. See the attached Proposed Order of Work.
- 12) CASING AND TUBING PROGRAM

*FRAC Existing Well*

TYPE	SPECIFICATIONS		FOOTAGE INTERVALS		CEMENT	
	Size	Grade	Weight per ft.	For drilling		Left in well
Conductor	13 3/8	-	48	443	102	25 Sx Cmt
Fresh Water	10 3/4	-	33	658	658	300 Sx Cmt
Coal	8 5/8	-	24	1682	Pulled	23 Sx Aquagel
Intermediate	7	-	22 & 23	2027	2027	15 Sx Aquagel
Production	4 1/2	K55	11.6	4470	4470	175 Sx Foam Cmt
Tubing	2 3/8	J55	4.7	-	3950	Siphon
Liners						

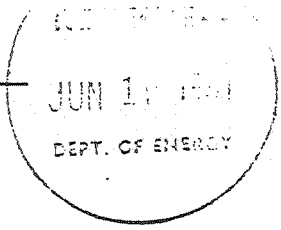
*Spud into  
from well*

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

For Division of Oil and Gas Use Only

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

*56 204*



- 1) Date: June 18, 1991
- 2) Operator's well number  
Island Creek Coal Co., D-9, Serial #131171
- 3) API Well No: 47 - 045 - 00114 - Fra  
State - County - Permit

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

- |   |  |
|---|--|
| <p>4) Surface Owner(s) to be served:</p> <p>(a) Name <u>Georgia-Pacific Corp.</u><br/>Address <u>Gerald Crouse</u><br/><u>Wyoming, WV 24898</u></p> <p>(b) Name _____<br/>Address _____</p> <p>(c) Name _____<br/>Address _____</p> | <p>5) (a) Coal Operator:</p> <p>Name <u>N/A</u><br/>Address _____</p> <p>(b) Coal Owner(s) with Declaration<br/>Name <u>Island Creek Coal Company</u><br/>Address <u>P.O. Box 840</u><br/><u>Holden, WV 25625</u></p> <p>Name _____<br/>Address _____</p> <p>(c) Coal Lessee with Declaration<br/>Name _____<br/>Address _____</p> |
| <p>6) Inspector <u>Richard Campbell</u><br/>Address <u>Box 163</u><br/><u>Hamlin, WV 25523-0163</u><br/>Telephone (304)-<u>824-7138</u></p>   |  |

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 2 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 Ashland Exploration, Inc.

By: W. Mark Parks *W. Mark Parks*  
Its: Operations Manager  
Address P.O. Box 391  
Ashland, KY 41114  
Telephone 606-329-5989

Subscribed and sworn before me this 18th day of June, 1991

Wicki W. Donta Notary Public  
My commission expires November 23, 1994



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DEC 04 1989

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-9 GW-765

LOCATION: Elevation: 1105.40 Quadrangle: MYRTLE

District: LOGAN County: LOGAN  
Latitude: 3825 Feet South of 37 Deg. 50Min. 0 Sec.  
Longitude 1350 Feet West of 82 Deg. 7 Min. 30 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: 08/13/88  
Well work Completed: 08/17/88  
Verbal Plugging  
Permission granted on: \_\_\_\_\_  
Rotary X Cable \_\_\_\_\_ Rig  
Total Depth (feet) 4498  
Fresh water depths (ft) N/A  
Salt water depths (ft) N/A

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
13 3/8	443	102	25 sxs cmt
10 3/4	658	658	300 sxs cmt
8 5/8	1682	0	23 sxs Aquagel
7	2027	2027	15 sxs Aquagel
4 1/2	4470	4470	MSX

Is coal being mined in area (Y/N)? Y  
Coal Depths (ft): N/A

OPEN FLOW DATA - Well drilled deeper to 4498' but not completed. *FOAM CMT*

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 \_\_\_\_\_ psig (surface pressure) after \_\_\_\_\_ 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 \_\_\_\_\_ 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.

For: DELBERT G. OLIVER, APPALACHIAN PROJECT MANAGER  
OXY USA, INC.

By: Delbert G. Oliver  
Date: November 29, 1989

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DEC 04 1989

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

WELL DRILLED TO 4498' BUT NOT COMPLETED.

WELL LOG:

<u>FORMATION</u>	<u>TOP (FT)</u>	<u>BOTTOM (FT)</u>
BIG LIME	2008	2178
BIG INJUN	2178	2221
SHALE	2221	2806
BEREA	2806	2863
DEVONIAN SHALE	2863	4483
ONONDAGA LIME	4483	4498

4498 new TD  
2188-old TD  
2310-new ftg.

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DEC 04 1989

DIVISION OF OIL & GAS  
DEPARTMENT OF ENERGY

2111

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, 2, 499
- 2) Operator's Well Number: Island Creek A-8, GW-765 3) Elevation: 1105.4
- 4) Well type: (a) Oil  / or Gas  /  
 (b) If Gas: Production  / Underground Storage  /  
 Deep  / Shallow  /
- 5) Proposed Target Formation(s): Devonian Shale 441
- 6) Proposed Total Depth: 4550' feet
- 7) Approximate fresh water strata depths: 109', 136', 140', 485-490'
- 8) Approximate salt water depths: 1170'
- 9) Approximate coal seam depths: 27', 298', 418', 534'
- 10) Does land contain coal seams tributary to active mine? Yes  / No  /
- 11) Proposed Well Work: DEVONIAN SHALE DEEPENING

12) \*NEW TUBULARS  
 \*\*TUBING, LINER & PKR TO BE PULLED 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		48	443	102	25 sx cmt
Fresh Water	10 3/4		33	658	658	300 sx cmt
Coal	8 5/8		24	1682	0	23 sx Aquagel
Intermediate	7		22 & 23	2027	2027	15 sx Aquagel
* Production	4 1/2	K55	11.6	4550	4550	300 cu ft
* Tubing	2 3/8	NUE	4.6	4550	4550	
** Liners	5 1/2		13	2188 (138')	2188 (138')	

TUBING 3 1/2 7.7 2211  
 PACKERS : Kind Gas Anchor Pkr  
 Sizes 7 X 5 1/2 X 3 1/2  
 Depths set 2050'

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 JUN 08 1988

30071  
 For Division of Oil and Gas Use Only  
 DIVISION OF OIL & GAS DEPARTMENT OF ENERGY  
 Fee(s) paid: Plat WW-9 WW-2B Bond 503 Blanket WPCP Agent  
 (Type)

Page 1 of 4  
Form WW2-A  
(09/87)  
File Copy

**RECEIVED**  
JUN 08 1988

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

1) Date: May 27, 1988  
2) Operator's well number  
Island Creek A-8, GW-765  
3) API Well No: 47 - 045 - 0114-DD  
State - County - Permit

4) Surface Owner(s) to be served:  
(a) Name Georgia Pacific Corp.  
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)-732-6223 (436-4507)

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  
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

Charles S. Stansbury Commissioner ~~Notary Public~~  
My commission expires April 9, 1989

Marked

ALLEGHENY

NUCLEAR

SURVEYS INC.

OXY USA INC

D-9

ISLAND CREEK ~~A-8~~ GW-765

G/R-N/N-DEN-BHT-IND

LOCATION MYRTLE QUADRANGLE  
 PRVNG/CO. LOGAN  
 FIELD LOGAN DISTRICT  
 WELL: ISLAND CREEK A-8 GW-765  
 COMPANY: OXY USA INC

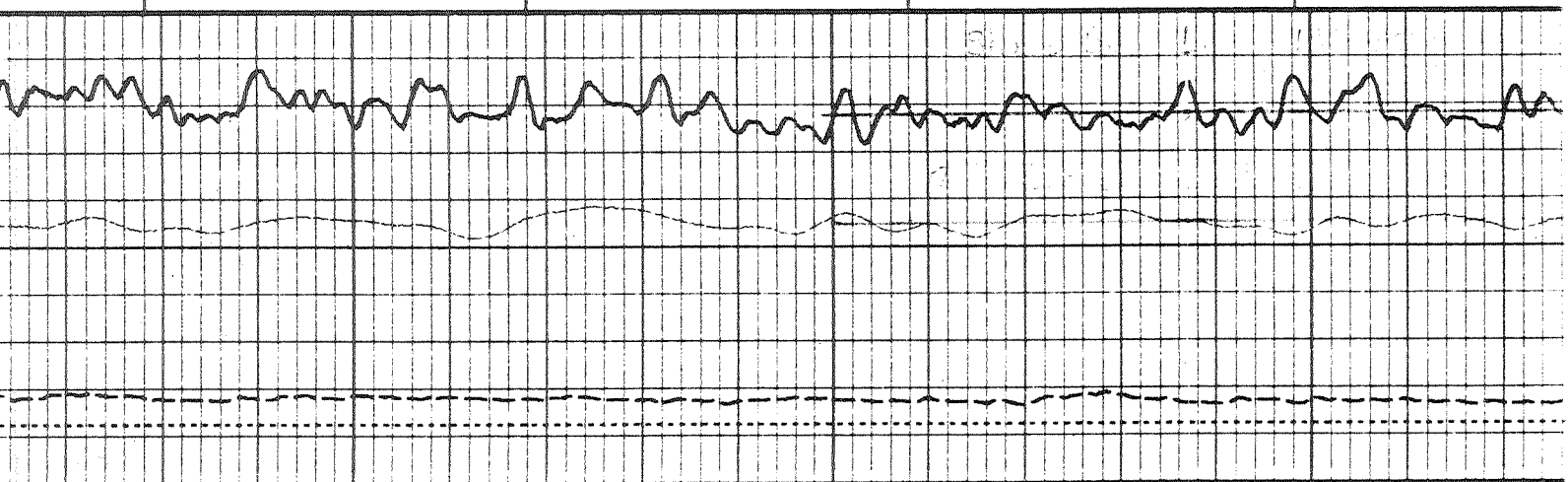
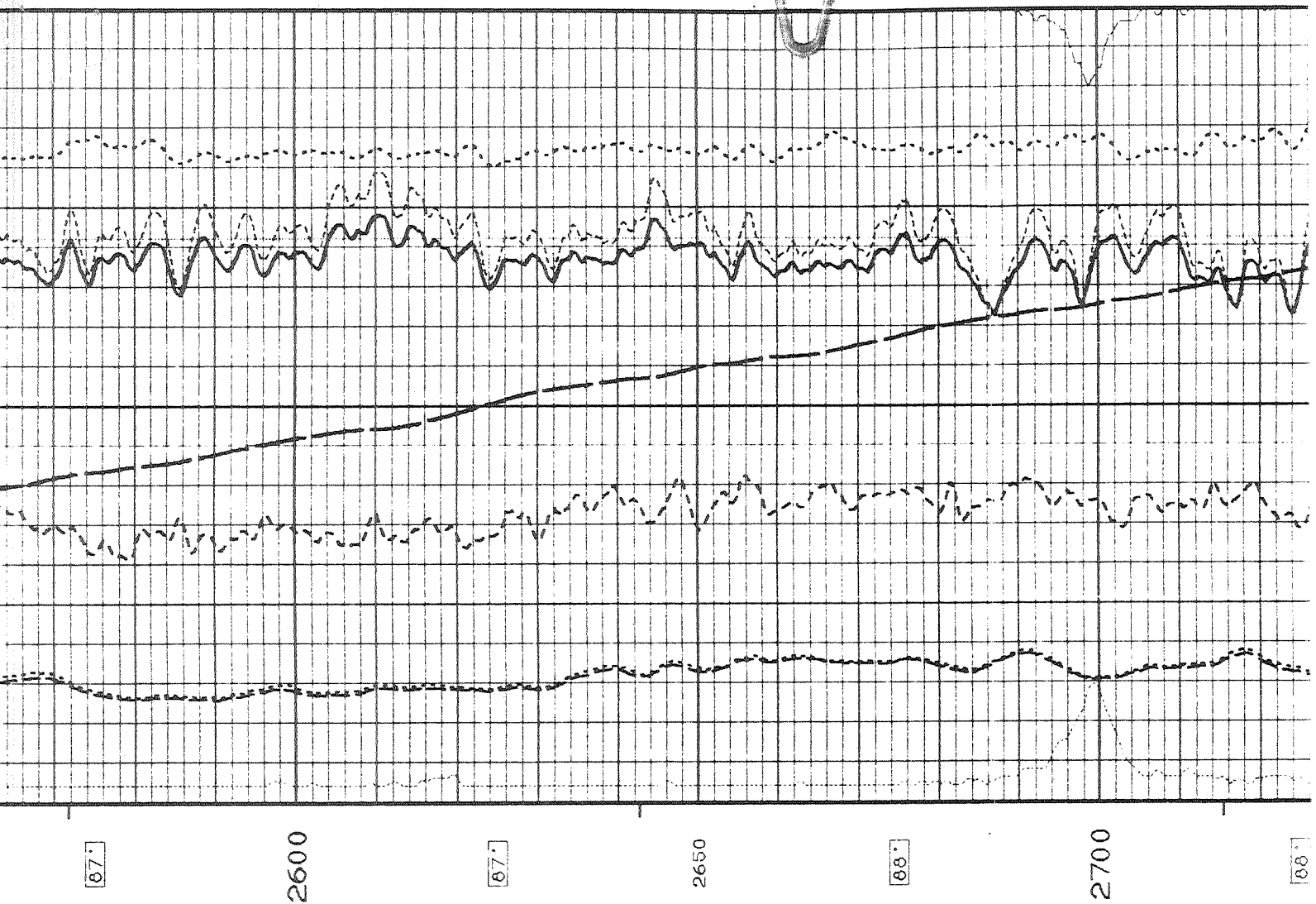
COMPANY OXY USA INC D-9  
 WELL ISLAND CREEK ~~A-8~~ GW-765  
 FIELD LOGAN DISTRICT  
 PROVINCE/COUNTY LOGAN  
 COUNTRY/STATE USA / WEST VIRGINIA  
 PERMIT NUMBER 47-45-0114 D

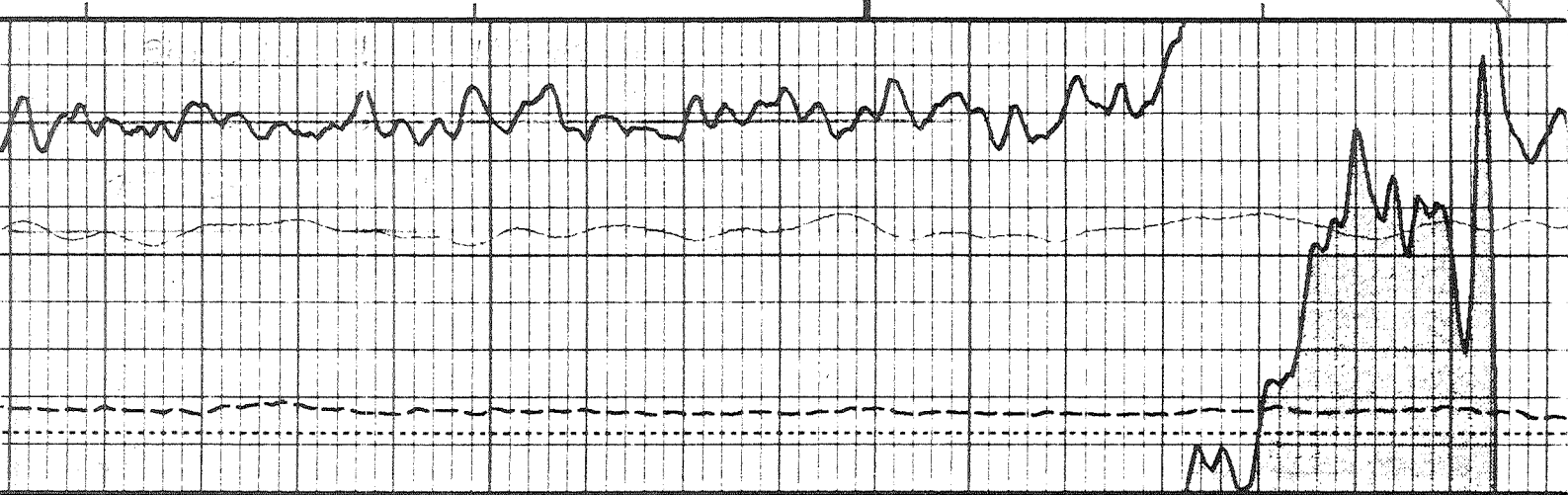
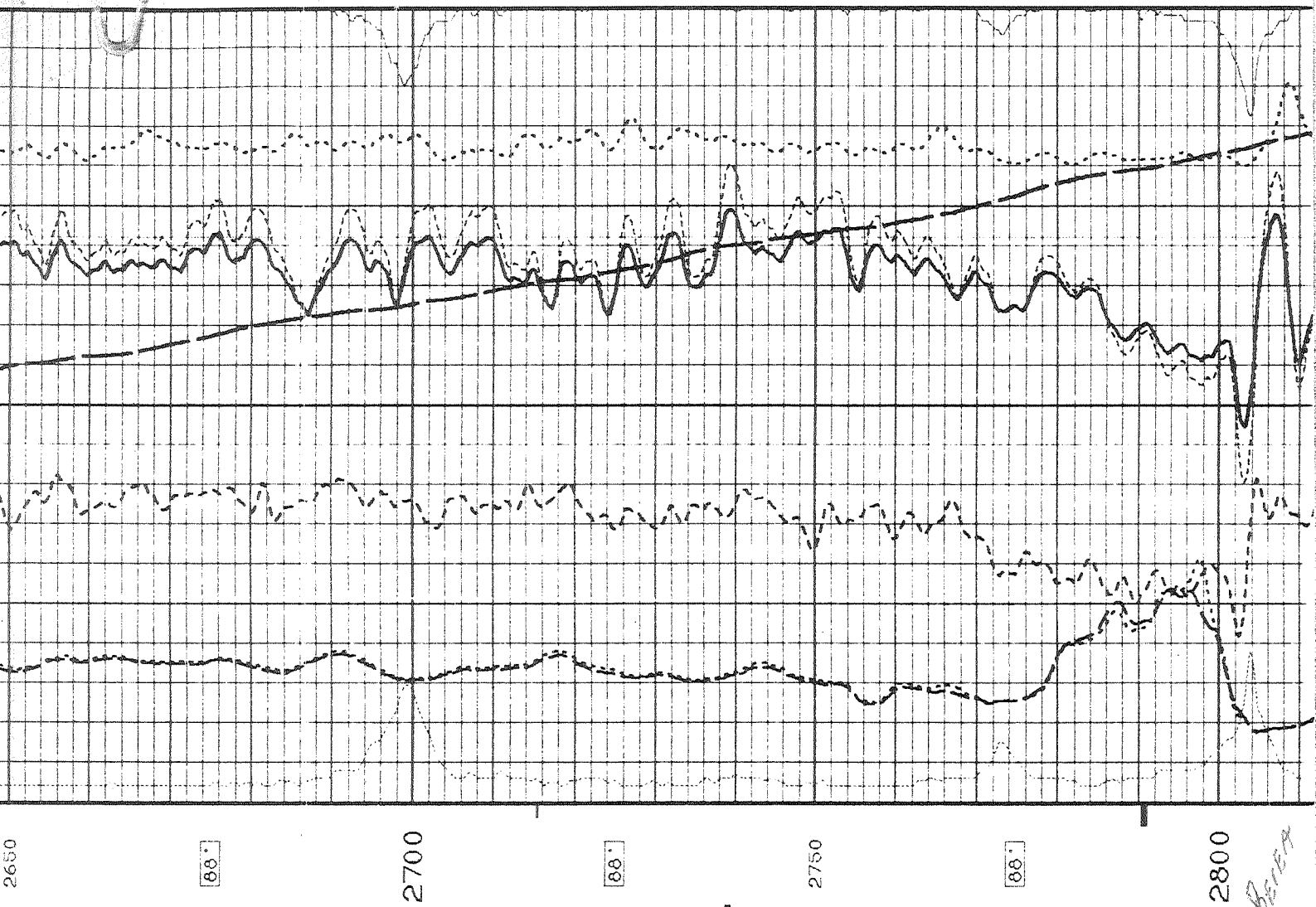
LOCATION MYRTLE QUADRANGLE				OTHER SERVICES
LSD	SEC	TWP	RCE	

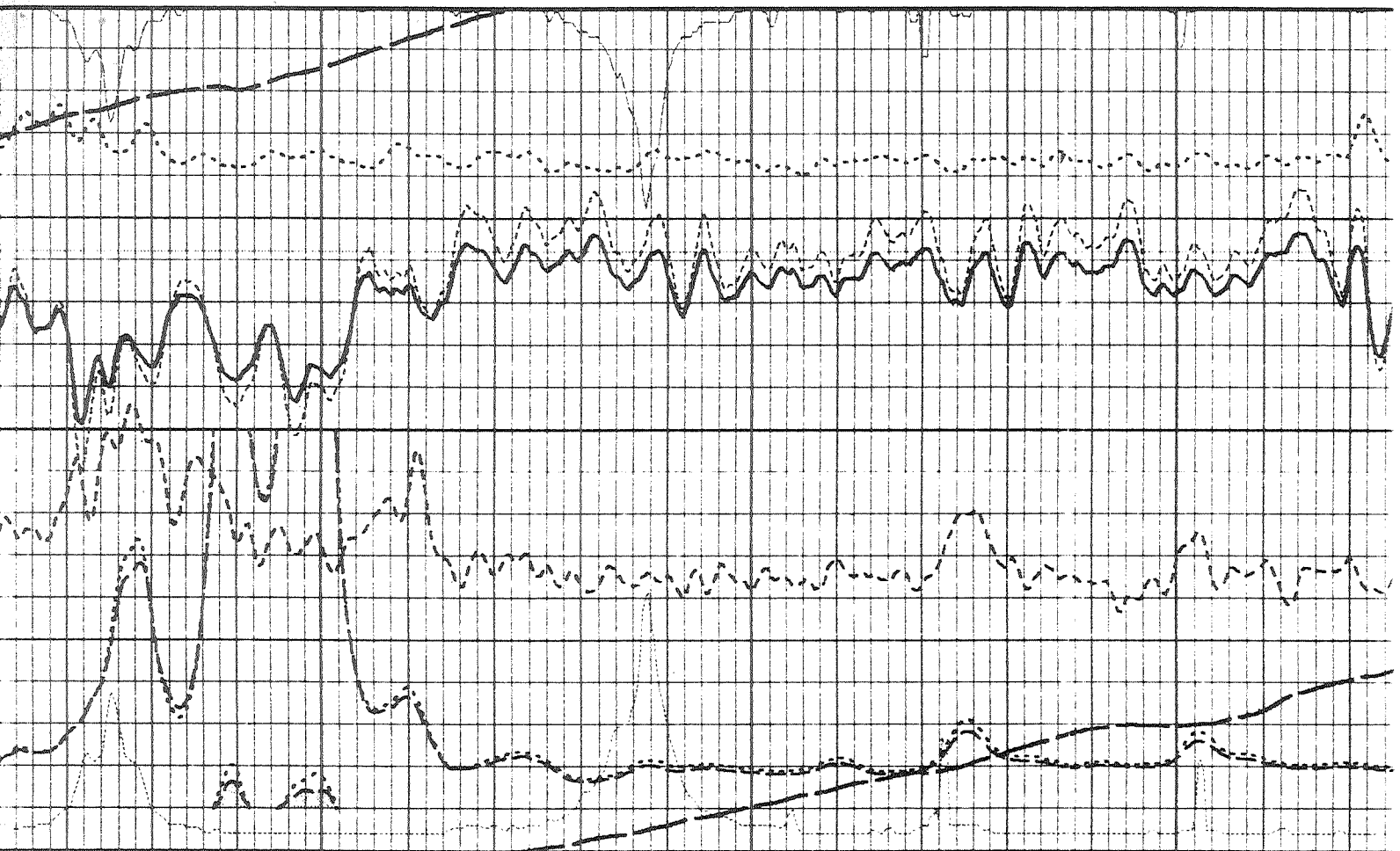
PERMANENT DATUM GROUND LEVEL ELEVATION 1106.7'  
 LOG MEASURED FROM K.B. 10 FT ABOVE PERMANENT DATUM  
 DRILLING MEASURED FROM KELLY

ELEVATIONS:	KB	1116.7'
	DF	1116.7'
	CL	1116.7'

DATE	16-AUG-88			
RUN NUMBER	MERGE			
DEPTH-DRILLER	4498.0'			
DEPTH-LOGGER	4498.0'			
FIRST READING	4498.0'			
LAST READING	SURFACE			
CASING-DRILLER	2027.0'			
CASING-LOGGER	2017.0'			
BIT SIZE	6.25"			
HOLE FLUID TYPE	AIR			
DENS. / VISC.				
PH/FLUID LOSS				
SAMPLE SOURCE				
RM @ MEAS TEMP				
RMF @ MEAS TEMP				
RMC @ MEAS TEMP				
SOURCE: RMF/RMC				
RM @ BHT				
TIME SINCE CIRC	3 HOURS			
MAX REC TEMP	110 DEGREES			
EQUIPMENT/BASE	# 264 CHA. WV			
RECORDED BY	V. CASTO			
WITNESSED BY	MR WELLS			







89

Top of Dev.  
Shale 2892

2850

90

2900

90

2950

3000

