

- New Location .
- Drill Deeper
- Redrill
- Abandonment

SURVEY 7-24-1962-W.S.Gravely-N.B.No.88 Pg.63-66

Company	Quinoco Petroleum Co. ¹⁰³⁹
Address	P.O. Box 1433-Charleston, WV. 25325
Farm	Surface: Arden Casto et ux
Tract (UNIT) Acres	207 3/4
Lease No.	282;282-1
Well (Farm) No.	1
Serial No.	692
Elevation (Spirit Level)	773.32
Quadrangle	WINFIELD NE. ELMWOOD 7 1/2 334
County	PUTNAM
District	UNION 6
Engineer	George H. Hall
Engineer's Registration No.	2602
File No.	
Drawing No.	
Date	AUG. 3, 1962
Scale	1" = 400'

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

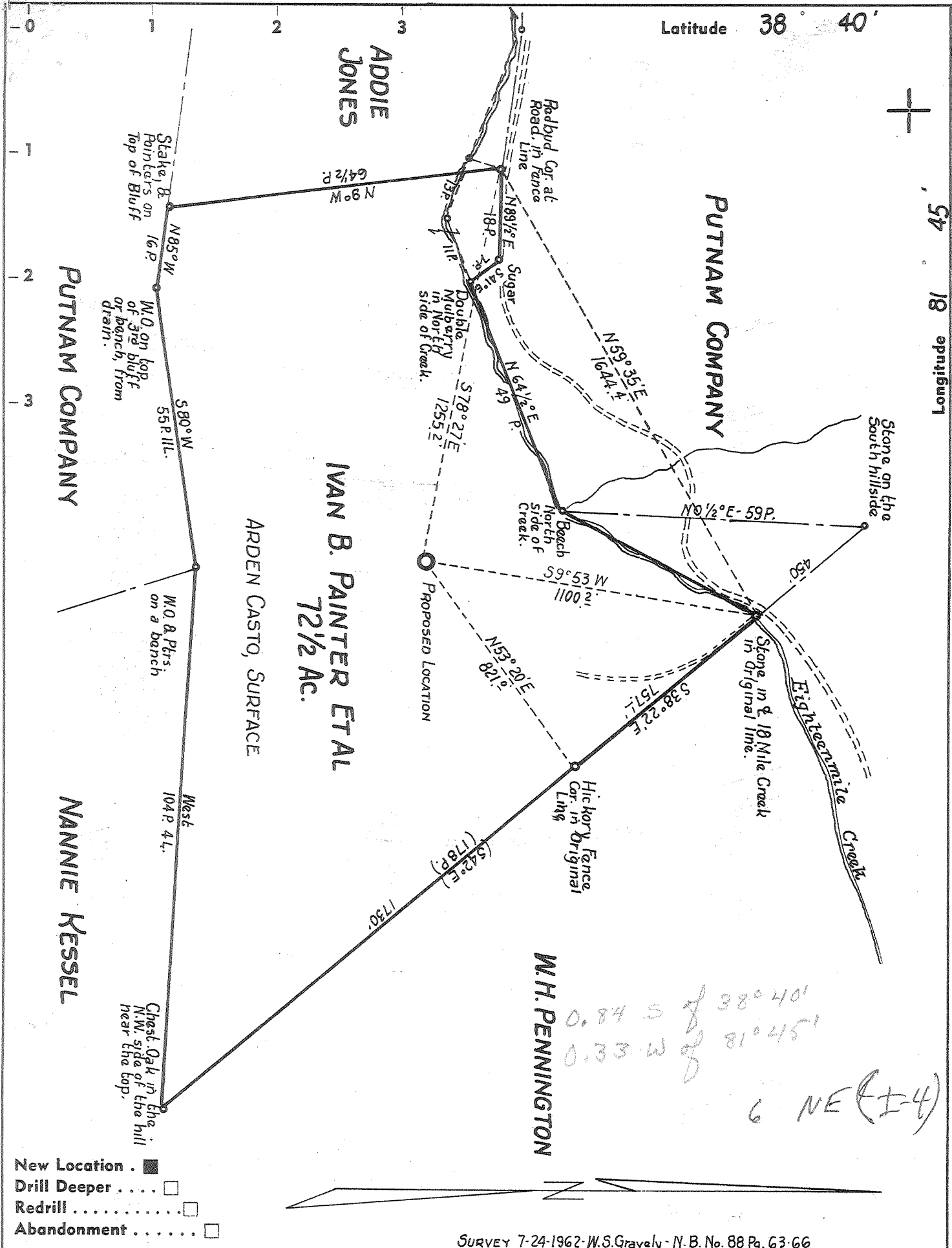
WELL LOCATION MAP
FILE NO. Put-684-Frac

+ 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.

MAR 16 1987

47-079



- New Location .
- Drill Deeper
- Redrill
- Abandonment

SURVEY 7-24-1962-W.S.Gravely-N.B.No. 88 Pg. 63-66

Company	COMMONWEALTH GAS CORPORATION
Address	P.O. BOX 1433 CHARLESTON, W. VA.
Farm	IVAN B. PAINTER ET AL
Tract	(UNIT) Acres 207 3/4 Lease No. 282;282-1
Well (Farm) No.	1 Serial No. 692
Elevation (Spirit Level)	773.32'
Quadrangle	WINFIELD N.E. - E.C.
County	PUTNAM District UNION
Engineer	George H. Hall
Engineer's Registration No.	2602
File No.	Drawing No.
Date	AUG. 3, 1962 Scale 1" = 400'

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

WELL LOCATION MAP
 FILE NO. **PUT-684**

+ 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.

No Samples 6-6-1962 DEEP WELL ✓



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION / 0

Quadrangle Winfield N. E.

Permit No. Put. 684

WELL RECORD

Oil or Gas Well Gas
(KIND)

Company COMMONWEALTH GAS CORPORATION
Address P. O. Box 1433, Charleston, W. Va.
Farm Ivan B. Painter et al Acres 207-3/4
Location (waters) Eighteen Mile Creek
Well No. 692 Elev. 773.32
District Union County Putnam
The surface of tract is owned in fee by Arden Casbo
Address Liberty, W. Va.
Mineral rights are owned by Ivan B. Painter et al
Box 102 Address Eleanor, West Virginia
Drilling commenced August 16, 1962
Drilling completed December 31, 1962
Date Shot _____ From _____ To _____
With _____
Open Flow _____ /10ths Water in _____ Inch
_____ /10ths Merc. in _____ Inch
Volume 112,000 Oriskany 119,000 Br. Shale Cu. Ft.
Rock Pressure _____ lbs. _____ hrs.
Oil _____ bbls., 1st 24 hrs.
WELL ACIDIZED _____

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			
16	22'	22'	Kind of Packer _____
18 3/4	686'	-	None
10 3/4	1049' 3"		Size of _____
8 3/4	2148' 5"	2148' 5"	Depth set _____
6 3/4	4919'	4919'	
3			Perf. top <u>4939</u>
2 3/8	4945'	4945'	Perf. bottom <u>4945</u>
Liners Used			Perf. top _____
			Perf. bottom _____

CASING CEMENTED _____ SIZE 7" No. Ft. 12-5-62 Date
22 bags behind the 7" casing

COAL WAS ENCOUNTERED AT _____ FEET _____ INCHES
_____ FEET _____ INCHES _____ FEET _____ INCHES
_____ FEET _____ INCHES _____ FEET _____ INCHES

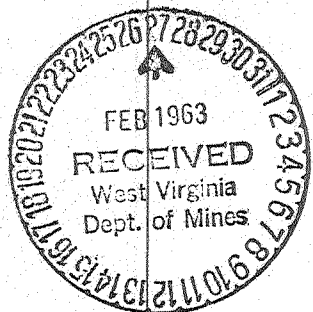
WELL FRACTURED with 20,000 gal. treated water and 12,000# sand (12-20-62) from 4942 to 4950'

RESULT AFTER TREATMENT 400,000 cu. ft. tubed in at 340,000 cu. ft.

ROCK PRESSURE AFTER TREATMENT 1160# 48 hours

Fresh Water _____ Feet Salt Water 1620 Feet

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
Surface			0	10			
Red rock			10	30			
Blue slate			30	60			
Sand			60	70			
White slate			70	100			
Red rock			100	140			
White slate			140	160			
Red rock			160	185			
White slate			185	205			
Red rock			205	240			
White slate			240	260			
Red rock			260	305			
White slate			305	340			
Red rock			340	355			
Lime shell			355	365			
Red rock			365	375			
Blue slate			375	500			
Red rock			500	525			
White slate			525	540			
Red rock			540	555			
Blue slate			555	580			
Red rock			580	590			
Sand			590	620			
Red rock			620	685			
Blue slate			685	710			
Slate & shell			710	725			
Blue slate			725	750			
Red rock			750	765			
Blue slate			765	925			



Formation	Color	Hard or Soft	Top / 0	Bottom	Oil, Gas or Water	Depth Found	Remarks
Sand			925	980			
Blue slate			980	990			
Sand			990	1030			
Blue slate			1030	1037			
Lime shell			1037	1043			
Slate & shells			1043	1124			
Sand			1124	1170			
Blue slate			1170	1204			
Sand			1204	1245			
Blue slate			1245	1320			
Slate & shells			1320	1560			
<u>SALT SAND</u>			1560	1774	Water	1620	Hole full
<u>MAXTON SAND</u>			1774	1790			
<u>BIG LIME</u>			1790	1958		1823	S.L.M.
White slate			1958	1963			
<u>INJUN SAND</u>			1963	2100			
Slate			2100	2145			
Lime shells			2145	2156		2150	S.L.M.
Slate & shells			2156	2440			
Brown shale			2440	2467			
<u>BEREA SAND</u>			2467	2479		2467	S.L.M.
Slate			2479	2969		2969	S.L.M.
Lime shell			2969	2982			
Slate & shells			2982	3678	Gas	3500	Show
<u>BROWN SHALE</u>			3678	3765			
Slate & shells			3765	3955			
<u>BROWN SHALE</u>			3955	4010		3985	S.L.M.
Lime shells			4010	4037			
Slate & shells			4037	4094			
<u>BROWN SHALE</u>			4094	4210	Gas	4094-4104	119 M.
Slate & shells			4210	4600			27 hrs. blew down
<u>BROWN SHALE</u>			4600	4840	Gas	4714-4728	to 73 M
<u>CORNIF. LIME</u>			4840	4935		4846	S.L.M.
<u>ORISKANY SAND</u>			4935	4974		4923	S.L.M.
Lime			4974	4979	Gas	4942	116 M
							Blew down to
							112 M.
404	2479			TOTAL DEPTH			
						4840	
83	3678					773	
822	4210					4067	
825	4335						
830	4600						
835	4725						
					<u>LOGS RUN</u>		
					Gamma-tron		
					Temperature		
					Caliber		
					Density		
					<u>VOLUME</u>		
					Tubed in at 340,000 cu. ft.		
					after fracturing		

Date February 18, 19 63

APPROVED COMMONWEALTH GAS CORPORATION, Owner

By *[Signature]*
(Title) Land & Eng. Dept.

FORM WW-2 (B) FILE COPY
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1) Date: January 14, 1987
 2) Operator's Well No. Ivan Painter #692
 3) API Well No. 47 State 079 County 0684 Permit FRAC

STATE OF WEST VIRGINIA

DIVISION OF OIL & GAS DEPARTMENT OF ENERGY, OIL AND GAS DIVISION
 DEPARTMENT OF ENERGY APPLICATION FOR A WELL WORK PERMIT

- 4) WELL TYPE: A Oil / Gas / B (If "Gas", Production / Underground storage / Deep / Shallow)
- 5) LOCATION: Elevation: 773.32 Watershed: Eighteen Mile Creek
 District: Union 6 County: Putnam 079 Quadrangle: Elmwood 338
- 6) WELL OPERATOR Quinoco Petroleum CODE: 40475 7) DESIGNATED AGENT Bill W. Backus
 Address P. O. Box 1433 Address P. O. Box 1433
Charleston, WV 25325 Charleston, WV 25325
- 8) OIL & GAS INSPECTOR TO BE NOTIFIED Name Jerry Tephabock
 Address Route 1, Box 101-A
Ripley, WV 25271 (304) 372-6805
- 9) DRILLING CONTRACTOR: Name N/A
 Address _____
- 10) PROPOSED WELL WORK: Drill / Drill deeper / Redrill / Stimulate / Plug off old formation / Perforate new formation / Brown Shale / Other physical change in well (specify) _____
- 11) GEOLOGICAL TARGET FORMATION, Oriskany Sand
- 12) Estimated depth of completed well, 4979 Actual feet
- 13) Approximate trata depths: Fresh, _____ feet; salt, _____ feet.
- 14) Approximate coal seam depths: N/A Is coal being mined in the area? Yes / No
- 15) CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	SPECIFICATIONS					FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS
	Size	Grade	Weight per ft.	New	Used	For drilling	Left in well		
Conductor	16					22'	22		Kinds
Fresh water	8-5/8					2148	2148		Sizes
Coal									
Intermediate	7"					4913	4913		
Production	2-3/8					4945	4945		Depths set
Tubing									
Lin.									Perforations: 25 Top 4,032 Bottom 4,202

Must squeeze 7" casing before fracturing!

OFFICE USE ONLY
 DRILLING PERMIT

Permit number 47-079-0684-FRAC

Date March 10 19 87

This permit covering the well operator and well location shown below is evidence of permission granted to drill in accordance with the pertinent legal requirements subject to the conditions contained herein and on the reverse hereof. Notification must be given to the District Oil and Gas Inspector. (Refer to No. 8) Prior to the construction of roads, locations and pits for any permitted work. In addition, the well operator or his contractor shall notify the proper district oil and gas inspector 24 hours before actual permitted work has commenced.)

The permitted work is as described in the Notice and Application, plat, and reclamation plan, subject to any modifications and conditions specified on the reverse hereof.

Permit expires March 10, 1989 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond: <input checked="" type="checkbox"/>	Agent: <input checked="" type="checkbox"/>	Plat: <input checked="" type="checkbox"/>	Casing: <input checked="" type="checkbox"/>	Fee: <u>20048</u> <u>182</u>	WPCP: <input checked="" type="checkbox"/>	S&E: <input checked="" type="checkbox"/>	Other: <input type="checkbox"/>
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John N. Johnston
 Director, Division of Oil and Gas
 by Margaret O. Hass

NOTE: Keep one copy of this permit posted at the drilling location.

See the reverse side of the APPLICANT'S COPY for instructions to the well operator.



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DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

State of West Virginia

DEPARTMENT OF ENERGY
Oil and Gas Division

Date JUNE 26, 1987
Operator's Well No. 692
Farm Ivan Painter
API No. 47 - 079 - 0684-F

WELL OPERATOR'S REPORT
OF
DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

WELL TYPE: Oil ___ / Gas X / Liquid Injection ___ / Waste Disposal ___ /
(If "Gas," Production ___ / Underground Storage ___ / Deep X / Shallow X /)

LOCATION: Elevation: 773.32' Watershed Eighteen Mile Creek
District: Union County Putnam Quadrangle Elmwood

COMPANY Quinoco Petroleum, Inc.
ADDRESS POB 1433, Charleston, WV 25325
DESIGNATED AGENT Bill W. Backus
ADDRESS POB 1433, Charleston, WV 25325
SURFACE OWNER Arden Casto
ADDRESS Rt. 1, Box 225, Given, WV 25245
MINERAL RIGHTS OWNER Lena Mae Painter
ADDRESS 306 Dupont Ave., Nitro, WV 25143
OIL AND GAS INSPECTOR FOR THIS WORK Jerry Tephabock
ADDRESS Rt. 1, Box 101-A Ripley, WV 25271
PERMIT ISSUED March 10, 1987
~~DRILLING~~ WORKOVER COMMENCED May 21, 1987
~~DRILLING~~ WORKOVER COMPLETED May 22, 1987
IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED ON _____

Casing & Tubing Size	Used in Drilling	Left in Well	Cement fill up Cu. ft.
16" Cond.	22'	22'	
13-10"			
9 5/8"			
8 5/8"	2148'	2148'	
7"	4913'	4913'	
5 1/2"			
4 1/2"			
3"			
2 3/8"	4945'	4945'	
Liners used			

GEOLOGICAL TARGET FORMATION Oriskany Sand Depth 4935-4974 feet
Depth of completed well 4979 feet Rotary ___ / Cable Tools ___
Water strata depth: Fresh ___ feet; Salt 1620 feet
Coal seam depths: _____ Is coal being mined in the area? no

OPEN FLOW DATA
Producing formation Oriskany Sand Pay zone depth 4942-4950 feet
Gas: Initial open flow 44 Mcf/d Oil: Initial open flow ___ Bbl/d
* Final open flow 78 Mcf/d Final open flow ___ Bbl/d
Time of open flow between initial and final tests ___ hours

* Static rock pressure 310 psig (surface measurement) after 72 hours shut in
(If applicable due to multiple completion--)
Second producing formation Brown Shale Pay zone depth 4032-4202 feet
Gas: Initial open flow 0 Mcf/d Oil: Initial open flow ___ Bbl/d
* Final open flow 78 Mcf/d Oil: Final open flow ___ Bbl/d
Time of open flow between initial and final tests ___ hours

* Static rock pressure 310 psig (surface measurement) after 72 hours shut in
* Rock pressures and open flows are commingled.

JUL 13 1987
(Continue on reverse side)

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

5/21/87 Lloyd Jackson service rig pulled 4945' of 2-3/8" tubing. McCullough moved on location and perforated Brown Shale with 25 shots. Perforation depths are: 4032', 4034', 4036', 4040', 4050', 4055', 4060', 4068', 4076', 4085', 4093', 4096', 4100', 4102', 4115', 4125', 4132', 4137', 4145', 4157', 4171', 4177', 4196', 4200', 4202'.

5/22/87 Ran bailer in 7" and cleaned out well. Ran 4945' of 2-3/8" tubing back in well.

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas
See original OG-10 attached.					

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DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

(Attach separate sheets as necessary)

QUINOCO PETROLEUM, INC.
Well Operator

By: Bruce Baker

Date: JUNE 26, 1987

Note: Regulation 2.02(i) provides as follows:
"The term 'log' or 'well log' shall mean a systematic detailed geological record of all formations, including coal, encountered in the drilling of a well."

JUL 13 1987