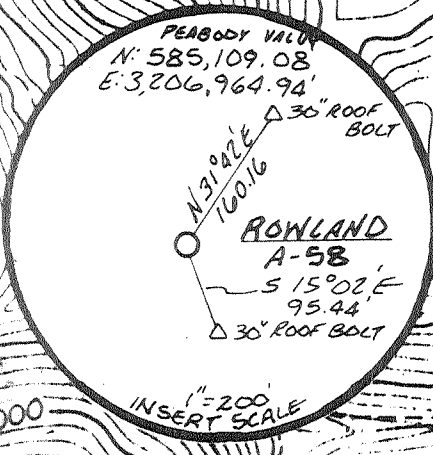
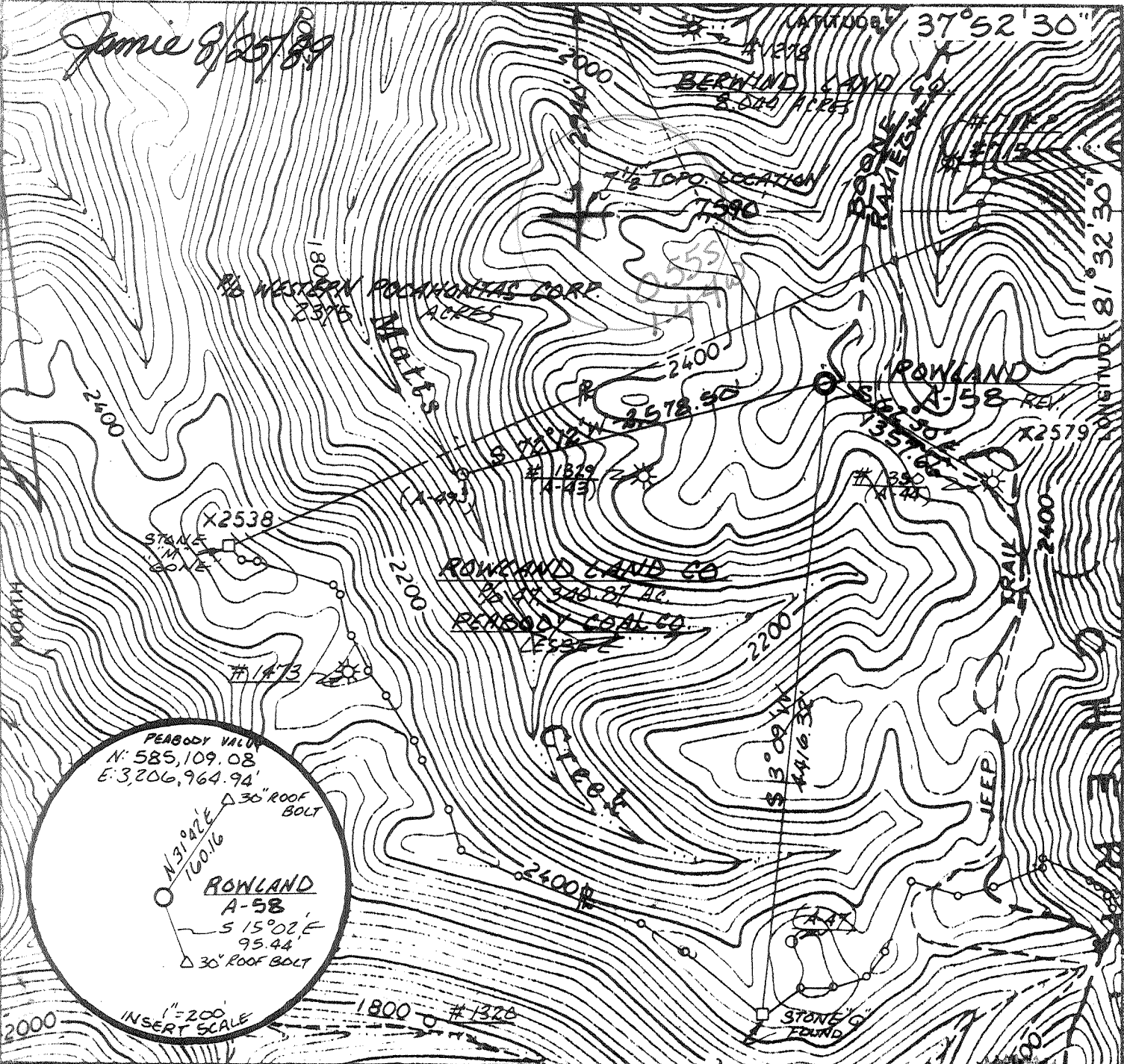
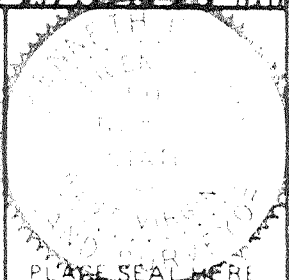


Janie 8/25/89



FILE NO. BMS 2-R
 DRAWING NO. _____
 SCALE 1" = 1,000'
 MINIMUM DEGREE OF ACCURACY 1:2500'
 PROVEN SOURCE OF ELEVATION FC-66 PEABODY COAL CO. 1596.91 IN HAZY CR.

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 MINES
 (SIGNED) Kenneth D. Ptas
 RPE _____ LLS 837-5U



○ DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS
 FORM IV-6
 TYPE OF WELL: GAS LIQUID INJECTION WASTE DISPOSAL
 GAS PRODUCTION STORAGE DEEP SHALLOW
 ELEVATION 2,551.0' WATERSHED MATT'S CREEK OF POND FORK
 DISTRICT CROOK COUNTY BOONE
 TRADENAME PILOT KNOB
 LAND OWNER ROWLAND LAND CO. ACREAGE 47,340.87
 LEASE OWNER ROWLAND LAND CO. LEASE ACREAGE 693.579
 LEASE NO. WV-389
 TYPE OF WELL: DRILL CONVERT DRILL DEEPER REFRAC FRACTURE OR STIMULATE PLUG OFF OLD FORMATION REPERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL SPECS _____
 PLUG AND ABANDON CLEAN OUT AND REPLUG
 TARGET FORMATION DEYONIAN SHALE ESTIMATED DEPTH 6,285'
 WELL OPERATOR OXY USA INC. DESIGNATED AGENT DELBERT G. OLIVER
 ADDRESS P.O. BOX 873 ADDRESS P.O. BOX 873
CHARLESTON, W.V. 25323 CHARLESTON, W.V. 25323

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION



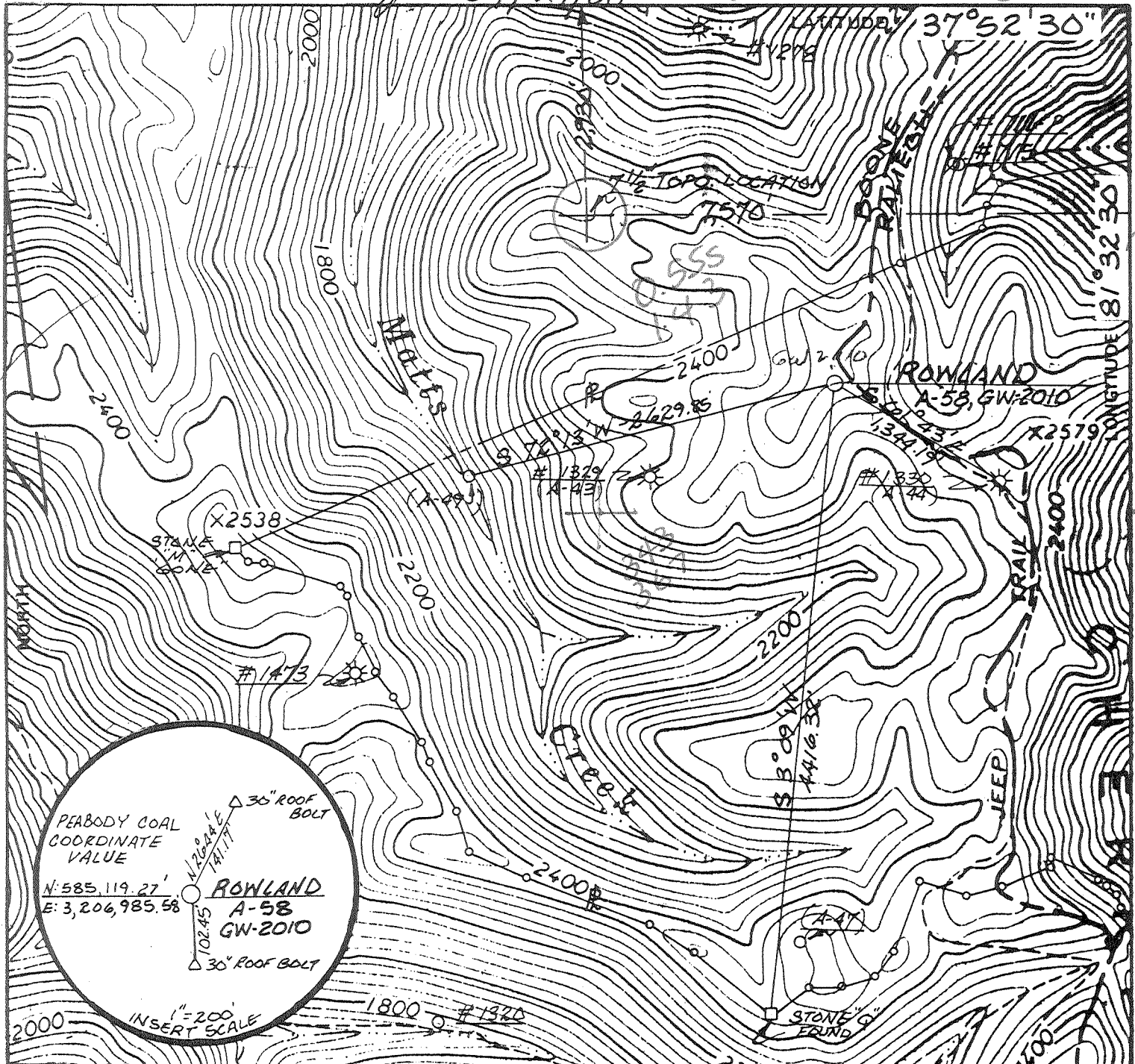
DATE JUNE 12TH 19 89
 OPERATOR'S WELL NO. ROWLAND A-58 REV.
 API WELL NO. GW NO. 2010
47 005 1491
 STATE COUNTY PERMIT
Revised
8/25/89

SEP 8 1989

DEEP WELL

June 9/29/88

55



PEABODY COAL
COORDINATE
VALUE

N: 585,119.27'
E: 3,206,985.58'

ROWLAND
A-58
GW-2010

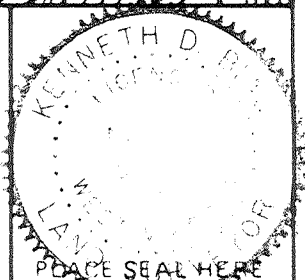
30" ROOF BOLT
102.45'

1" = 200'
INSERT SCALE

FILE NO KDB-1-6
DRAWING NO _____
SCALE 1" = 1,000'
MINIMUM DEGREE OF
ACCURACY 1:2500'
PROVEN SOURCE OF
ELEVATION PC-66 PEABODY
COAL CO. 1596.91 IN HAZY CR.

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 REGU-
LATIONS ISSUED AND PRESCRIBED BY THE DEPART-
MENT OF MINES

(SIGNED) Kenneth D. Pios
RPE _____ LLS 837



(*) DENOTES LOCATION OF
WELL ON UNITED STATES
TOPOGRAPHIC MAPS

FORM IV-6
(8/78)



DATE SEPTEMBER 8 1988
OPERATOR'S WELL NO RLC-A-58
API WELL NO GW-2010
47 005 1491
STATE COUNTY PERMIT

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

WELL TYPE OIL _____ GAS LIQUID INJECTION _____ WASTE DISPOSAL _____
OF "GAS" PRODUCTION STORAGE _____ DEEP _____ SHALLOW

LOCATION ELEVATION 2,551.09' WATER SHED MATT'S CREEK OF POND FORK
DISTRICT CROOK COUNTY BOONE
QUADRANGLE PILOT KNOB 547 0066 Bald Knob EC

SURFACE OWNER ROWLAND LAND CO. ACREAGE 47,340.87
OIL & GAS ROYALTY OWNER ROWLAND LAND CO. LEASE ACREAGE 693.579
LEASE NO WV-389

PROPOSED WORK DRILL CONVERT _____ DRILL DEEPER _____ REDRILL _____ FRACTURE OR
STIMULATE PLUG OFF OLD FORMATION _____ PERFORATE NEW
FORMATION _____ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____

PLUG AND ABANDON _____ CLEAN OUT AND REPLUG _____
TARGET FORMATION DEVONIAN SHALE ESTIMATED DEPTH 6,285'
WELL OPERATOR OXY USA INC. DESIGNATED AGENT DELBERT G. OLIVER
ADDRESS P.O. BOX 873 ADDRESS P.O. BOX 873
CHARLESTON, WV. 25323 3072 CHARLESTON, WV. 25323

OCT 17 1988

DEEP WELL b-6 unnamed (L)

RECEIVED
MAR 22 1989

12-Oct-88
PI # 47- 5-01491

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: ROWLAND LAND CO., LTD. Operator Well No.: A-58, GW-2010

LOCATION: Elevation: 2551.09 Quadrangle: PILOT KNOB

District: CROOK County: BOONE
Latitude: 2930 Feet South of 37 Des. 52Min. 30 Sec.
Longitude 7570 Feet West of 81 Des. 32 Min. 30 Sec.

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

Agent: DELBERT G. OLIVER

Inspector: JERRY HOLCOMB *TO reached 11/22/88*
Permit Issued: 10/12/88
Well work Commenced: 11/07/88
Well work Completed: 02/18/89
Verbal Plussings: N/A
Permission granted on: N/A
Rotary Cable Ris
Total Depth (feet) 7057
Fresh water depths (ft) 100

Casings & Tubing Size	Used in Drilling	Left in Well	Cement Fill Cu. Ft.
20"	40'	40'	Surface
13.375"	674'	674'	Surface
9.625"	1732'	1732'	840 cu ft
7.0"	3639'	3639'	564 cu ft
4.5"	-	7052'	352 cu ft

Salt water depths (ft) _____
Is coal being mined in area (Y/N)? _____
Coal Depths (ft): 179-185; 280-292
485-490; 990-995
1291-1296

OPEN FLOW DATA

Weir,
Producing formation Lower Huron, Upper Devonian Pay zone depth (ft) 6191
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow 2325 MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests 22.5 Hours
Static rock Pressure 450 psig (surface pressure) after 16 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.

MAR 31

Delbert G. Oliver, Appalachian Project Manager
For: OXY USA, INC
By: *Delbert G. Oliver*
Date: 3-22-89

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MAR 22 1989

ROWLAND LAND CO. A-58

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

Details of Perforated Intervals, Fracturing or Stimulating, Physical Change, Etc:

Lower Huron: Perforated 5775-6191 (47 Holes).
Frac'd W/50,000# Sand, 110 BLW, 614 MCFN₂.

Upper Devonian: Perforated 4600-5152 (47 Holes).
Frac'd W/50,000# Sand, 111 BLW, 497 MCFN₂.

Berea-Weir: Perforated 4014-4411 (92 Holes).
Frac'd W/50,000# Sand, 141 BLW, 579 MCFN₂.

WELL LOG

<u>FORMATION</u>	<u>TOP (FT)</u>	<u>BOTTOM (FT)</u>
SAND	0	179
COAL	179	185
SAND	185	280
COAL	280	292
SAND	292	485
COAL	485	490
SAND	490	762
SILTSTONE	762	790
SAND	790	990
COAL	990	995
SILTSTONE	995	1078
SAND	1078	1183
SILTSTONE	1183	1291
COAL	1291	1296
SILTSTONE	1296	1316
SAND	1316	1341
SILTSTONE	1341	1434
SAND	1434	1458
SILTSTONE	1458	1924
SAND	1924	2030
SILTSTONE	2030	2050
SAND	2050	2066
SILTSTONE	2066	2208
SAND	2208	2244
SILTSTONE	2244	2264
SAND	2264	2316
SILTSTONE	2316	2395
SAND	2395	2475
SILTSTONE	2475	2500
SAND	2500	2605
SILTSTONE	2605	2720
RAVENCLIFF	2720	2884
SILTSTONE	2884	2933
AVIS L.S.	2933	2965
SILTSTONE	2965	3024
UPPER MAXTON	3024	3092

MAR 31 1989

(con't)

WELL LOG

<u>FORMATION</u>	<u>TOP (FT)</u>	<u>BOTTOM (FT)</u>
MIDDLE MAXTON	3092	3404
SILTSTONE	3404	3426
LOWER MAXTON	3426	3496
LITTLE LIME	3496	3850
BIG LIME	3850	3920
SILTSTONE	3920	3954
SAND	3954	3960
SILTSTONE	3960	4012
UPPER WEIR	4012	4068
SHALE	4068	4155
LOWER WEIR	4155	4165
SHALE	4165	4387
SUNBURY	4387	4398
BEREA	4398	4412
DEVONIAN SHALE	4412	4600
GORDON	4600	4608
DEVONIAN SHALE	4608	5514
LOWER HURON	5514	6162
JAVA	6162	6622
RHINESTREET	6622	7018
MARCELLUS	7018	7058
ONONDACA	7058	7068

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MAR 22 1989

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

7770

MAR 31 1989

12
005-1491
Issued 10/12/88 Expires 10/12/90
Page 3 of 4

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

- 1) Well Operator: OXY USA INC. 36205, 1, 546
- 2) Operator's Well Number: Rowland Land Company A-58, GW 2010 3) Elevation: 2551.09'
- 4) Well type: (a) Oil / or Gas X /
(b) If Gas: Production X / Underground Storage /
Deep / Shallow X /
- 5) Proposed Target Formation(s): Devonian Shale
- 6) Proposed Total Depth: 6285 feet
- 7) Approximate fresh water strata depths: 141' 1142'
- 8) Approximate salt water depths: 211'-213', 329'-332', 360-363, 545-546, 1005-1009, 1131-1134'
- 9) Approximate coal seam depths: 201', 311', 461' (mined out), 781', 1121' (mined out), 1181' (mined out) and 1261' (mined out)
- 10) Does land contain coal seams tributary to active mine? Yes X / No /
- 11) Proposed Well Work: DRILL DEVONIAN SHALE WELL
- 12)

CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT
	Size	Grade	Weight per ft.	For drilling	Left in well	
Conductor	20"	H-40	90#	70'	70'	Surface
Fresh Water	13-3/8"	H-40	48#	250'	250'	Surface
Coal	9-5/8"	K-55	36#	1350'	1350'	Surface
Intermediate	7"	K-55	23#	3700'	3700'	Surface
Production	4-1/2"	K-55	11.6#	6285'	6285'	Surface 300 cu ft
Tubing	2-3/8"	J-55	4.7#		6215'	
Liners						

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SEP 26 1988

PACKERS : Kind _____
Sizes _____
Depths set _____
DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

7770

30095
31
31

For Division of Oil and Gas Use Only

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

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SEP 26 1988

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

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

1) Date: September 22, 1988
2) Operator's well number
Rowland Land Company A-58, GW 2010
3) API Well No: 47 - 005 - 1491
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 Rowland Land Company, LTD
Address 1033 Quarrier St., Room 301
Charleston, WV 25301 Attn: David Pollitt
 - (b) Name _____
Address _____
 - (c) Name _____
Address _____
- 5) (a) Coal Operator:
- Name Peabody Coal Company, Attn: Toby Waller
Address P. O. Box 1233
Charleston, WV 25324
 - (b) Coal Owner(s) with Declaration
Name Rowland Land Company, LTD
Address 1033 Quarrier St., Room 301
Charleston, WV 25301
Name Attn: David Pollitt
Address _____
 - (c) Coal Lessee with Declaration
Name Peabody Coal Company, Attn: Toby Waller
Address P. O. Box 1233
Charleston, WV 25324
- 6) Inspector Rodney Dillon
Address P. O. Box 1526
Sophia, WV 25921
Telephone (304)-683-3989/465-1911

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
XX 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 *Delbert G. Oliver*
Its: Project Manager
Address P. O. Box 873
Charleston, WV 25323
Telephone (304) 344-8383

Subscribed and sworn before me this 22 day of Sept, 1988

Donald J. Bay
My commission expires June 1, 1989
Commissioner
Notary Public