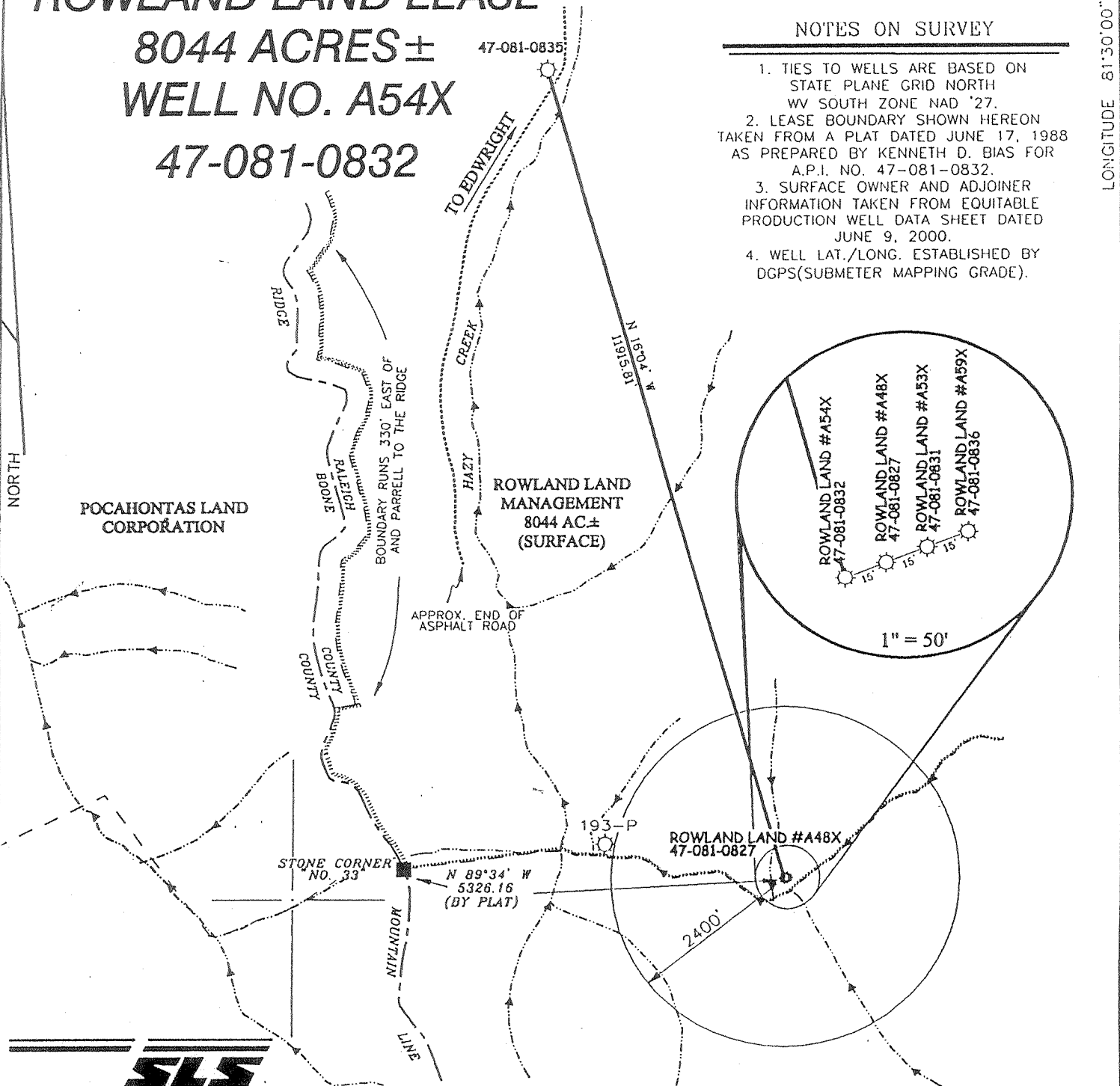


# ROWLAND LAND LEASE

## 8044 ACRES ± WELL NO. A54X 47-081-0832

### NOTES ON SURVEY

1. TIES TO WELLS ARE BASED ON STATE PLANE GRID NORTH WV SOUTH ZONE NAD '27.
2. LEASE BOUNDARY SHOWN HEREON TAKEN FROM A PLAT DATED JUNE 17, 1988 AS PREPARED BY KENNETH D. BIAS FOR A.P.I. NO. 47-081-0832.
3. SURFACE OWNER AND ADJOINER INFORMATION TAKEN FROM EQUITABLE PRODUCTION WELL DATA SHEET DATED JUNE 9, 2000.
4. WELL LAT./LONG. ESTABLISHED BY DGPS(SUBMETER MAPPING GRADE).



POCAHONTAS LAND CORPORATION

ROWLAND LAND MANAGEMENT  
8044 AC ±  
(SURFACE)

ROWLAND LAND #A48X  
47-081-0827

ROWLAND LAND #A54X  
47-081-0832

ROWLAND LAND #A48X  
47-081-0827

ROWLAND LAND #A53X  
47-081-0831

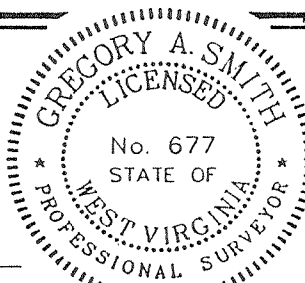
ROWLAND LAND #A59X  
47-081-0836

1" = 50'



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 JUNE 26, 2000

OPERATORS WELL NO. A54X

API WELL NO. 47 - 081 - 0832P

STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 200 FILE NO. 4425PA54X (93-10)

PROVEN SOURCE OF ELEVATION TOP OF KNOB ELEVATION 2312' SCALE 1" = 2000'

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 1642' WATERSHED TRIBUTARY OF HAZY CREEK

DISTRICT MARSH FORK COUNTY RALEIGH QUADRANGLE PILOT KNOB 7.5'

SURFACE OWNER ROWLAND LAND MANAGEMENT ACREAGE 8044

ROYALTY OWNER ROWLAND LAND MANAGEMENT LEASE ACREAGE 8044

PROPOSED WORK : LEASE NO. \_\_\_\_\_

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) \_\_\_\_\_ TARGET FORMATION DEVONIAN SHALE

ESTIMATED DEPTH 6574'

WELL OPERATOR CLOUSER WELL SERVICE, INC. DESIGNATED AGENT JOHN CLOUSER

ADDRESS RT. 3 BOX 37-A, SALEM, WV 26426 ADDRESS RT. 3 BOX 37-A, SALEM, WV 26426

LONGITUDE 81°30'00" LAT. 37°50'15.65"

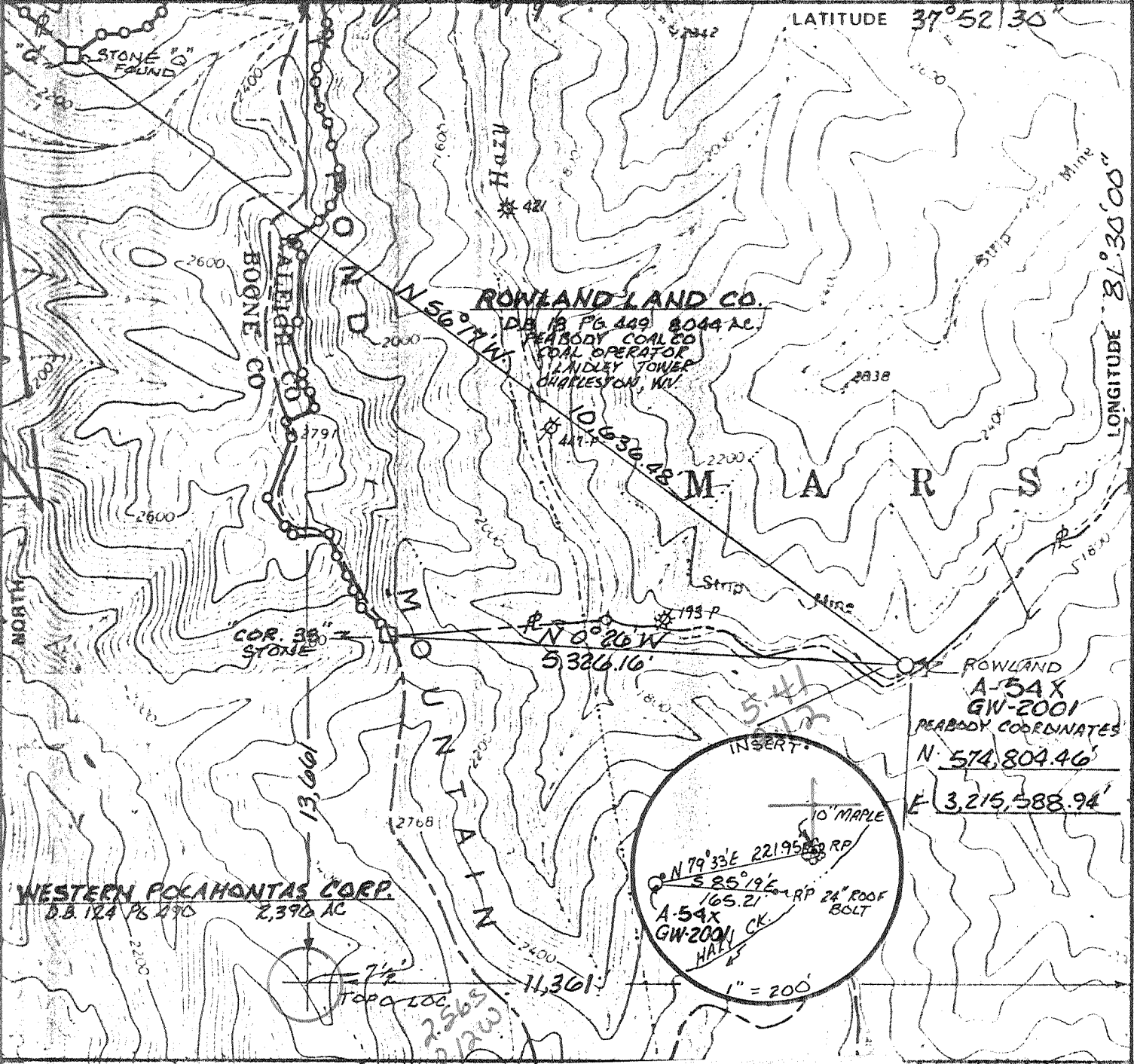
COUNTY NAME RALEIGH PERMIT 0832P

WELL NO. 200

June 8/11/88

LATITUDE 37°52'30"

LONGITUDE 81°30'00"



FILE NO KDB-1-6  
 DRAWING NO \_\_\_\_\_  
 SCALE 1" = 1500'  
 MINIMUM DEGREE OF ACCURACY 1:2500'  
 PROVEN SOURCE OF ELEVATION PC-66 PEABODY COAL CO. (U.S.G.S.) 1576.91' IN HAZY CREEK HOLLOW

CO: 081 FMT: 832  
 Loc Digitized from OGIS 7.5' Mxler  
 QUAD: 547 DATE: 12-JUN-90  
 LAT: 37 52.5 Miles South: 2.57  
 LONG: 81 30.0 Miles West: 2.16  
 (SIGNED) Kenneth D. Bios  
 RPE \_\_\_\_\_ LLS 837

STATE \_\_\_\_\_  
 COUNTY \_\_\_\_\_  
 PLACE SEAL HERE

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS  
 FORM IV 6  
 (8 78)



DATE JUNE 17 19 88  
 OPERATOR'S WELL NO R.L.C. A-54X, GW-2001  
 API WELL NO \_\_\_\_\_  
47 081 0832  
 STATE COUNTY PERMIT

STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION

WELL TYPE OIL \_\_\_ GAS X LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
 (IF "GAS") PRODUCTION \_\_\_ STORAGE \_\_\_ DEEP \_\_\_ SHALLOW \_\_\_  
 LOCATION ELEVATION 1627.72' WATERSHED HAZY CK of BIG COAL RIVER  
 DISTRICT MARSH FORK 2 COUNTY RALEIGH  
 QUADRANGLE PILOT KNOB 547 006 6 Bald Knob EC  
 SURFACE OWNER ROWLAND LAND CO. ACREAGE P/O 47,340.87 AC.  
 OIL & GAS ROYALTY OWNER ROWLAND LAND CO. LEASE ACREAGE 693.579 AC.  
 LEASE NO W.V. 389  
 PROPOSED WORK DRILL X CONVERT \_\_\_ DRILL DEEPER \_\_\_ REDRILL \_\_\_ FRACTURE OR STIMULATE X 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 MD-7392', TVD-6137' AUG 22 1988  
 WELL OPERATOR OXY USA Inc. DESIGNATED AGENT DELBERT G. OLIVER  
 ADDRESS P.O. BOX 873 ADDRESS P.O. BOX 873  
CHARLESTON, WV. 25323 3012 CHARLESTON, WV. 25323

Directional well 6-6 unnamed col (207)

RECEIVED  
APR 28 1989

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

DIVISION OF OIL & GAS  
DEPARTMENT OF ENERGY

Operator's Report of Well Work

Farm name: ROWLAND LAND COMPANY LTD. Operator Well No.: A-54X, GW-2001

LOCATION: Elevation: 1627.72 Quadrangle: PILOT KNOB

District: MARSH FORK County: RALEIGH  
Latitude: 13661 Feet South of 37 Des. 52Min. 30 Sec.  
Longitude 11361 Feet West of 81 Des. 30 Min. 0 Sec.

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

Agent: DELBERT G. OLIVER  
Inspector: RODNEY G. DILLON *TD reached 12/10/88*  
Permit Issued: 08/21/88  
Well work Commenced: 11-26-88  
Well work Completed: 4-10-89  
Verbal Plugging  
Permission granted on: \_\_\_\_\_  
Rotary X Cable \_\_\_\_\_ Rig \_\_\_\_\_  
Total Depth (feet) 6574' MD; 5446' TVD  
Fresh water depths (ft) \_\_\_\_\_

Casings & Tubing	Used in Drilling	Left in Well	Cement Fill Cu. Ft.
Size Conductor			
16"	40'	40'	Surface
Fresh Wtr			
11.75"	430'	430'	Surface
Intermediate			
8.625"	2769'	2769'	Surface
Production			
5.5"	6550'	6550'	1856 cuft
Tubing			
2.375"		6240'	

OPEN FLOW DATA

Lower Huron, Upper Devonian, Big Lime,  
Producing formation Middle Maxon/Ravencliff Pay zone depth (ft) 1713-6262  
Gas: Initial open flow 0 MCF/d Oil: Initial open flow \_\_\_\_\_ Bbl/  
Final open flow 84 MCF/d Final open flow \_\_\_\_\_ Bbl/  
Time of open flow between initial and final tests 14 Hour  
Static rock Pressure 515 psig (surface pressure) after 43 Hour

Second producing formation \_\_\_\_\_ Pay zone depth (ft) \_\_\_\_\_  
Gas: Initial open flow \_\_\_\_\_ MCF/d Oil: Initial open flow \_\_\_\_\_ Bbl/  
Final open flow \_\_\_\_\_ MCF/d Final open flow \_\_\_\_\_ Bbl/  
Time of open flow between initial and final tests \_\_\_\_\_ Hour  
Static rock Pressure \_\_\_\_\_ psig (surface pressure) after \_\_\_\_\_ Hour

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATE 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: 26 APRIL 1989

MAY 5 1989

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

Formation

Lower Huron Perforated 5390-6262' (70 holes). Frac'd with 23,000# sand, 47 BLW, 644 MCF N2.

Upper Devonian Perforated 3780-4650' (69 holes). Frac'd with 50,000# sand, 88 BLW, 621 MCF N2.

Big Lime Perforated 2795-2804' (37 holes). Acidized with 48 Bbl HCL acid and 240 MCF N2.

Middle Maxon/Ravenclyff Perforated 1713-2390' (78 holes). Frac'd with 50,000# sand, 105 BLW, 671 MCF N2.

WELL LOG

<u>Formation</u>	<u>Top (Ft)</u>	<u>Bottom (Ft)</u>
Sand	0	94
Siltstone	94	314
Sand	314	347
Siltstone	347	670
Sand	670	760
Siltstone	760	794
Sand	794	850
Siltstone	850	1024
Sand	1024	1096
Siltstone	1096	1175
Sand	1175	1245
Siltstone	1245	1301
Sand	1301	1366
Siltstone	1366	1562
Sand	1562	1590
Siltstone	1590	1668
Ravenclyff	1668	1870
Siltstone	1870	1933
Avis Limestone	1933	1974
Siltstone	1974	2004
Upper Maxton	2004	2070
Siltstone	2070	2288
Middle Maxton	2288	2379
Siltstone	2379	2509
Lower Maxton	2509	2566
Siltstone	2566	2604
Little Lime	2604	2675
Pencil Cave	2675	2707
Big Lime	2707	3138
Siltstone	3138	3167
Shale	3167	3179
Siltstone	3179	3252
Weir	3252	3467
Shale	3467	3780
Sunbury	3780	3811
Devonian Shale	3811	4066
Gordon	4066	4081
Devonian Shale	4081	5410
Lower Huron	5410	6296
Java	6296	

**RECEIVED**  
APR 28 1989

DIVISION OF OIL & GAS  
DEPARTMENT OF ENERGY

MAY 5 1989

7531

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. 30205, 2, 546
- 2) Operator's Well Number: Rowland Land Co. A-54X, GW 2001 3) Elevation: 1627.72'
- 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: 7392' MD / 6137' TVD feet
- 7) Approximate fresh water strata depths: 169'
- 8) Approximate salt water depths: 1827'
- 9) Approximate coal seam depths: 17', 128'
- 10) Does land contain coal seams tributary to active mine? Yes  / No  /
- 11) Proposed Well Work: DRILL DIRECTIONAL DEVONIAN SHALE WELL

CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT
	Size	Grade	Weight per ft.	For drilling	Left in well	Fill-up (cu. ft.)
Conductor	16"	H-40	65	45'	45'	Surface
Fresh Water	11-3/4"	H-40	42	500'	500'	Surface
Coal						380CSR10-11.3 380CSR10-11.2
Intermediate	8-5/8"	K-55	24	2814' MD 2660' TVD	2814' MD 2660' TVD	Surface
Production	5-1/2"	K-55	17	7392' MD 6137' TVD	7392' MD 6137' TVD	380CSR10-11.1 415 cu ft.
Tubing	2-3/8"	J-55	4.7	7320' MD	7320' MD	
Liners						

RECEIVED  
AUG 05 1988

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

For Division of Oil and Gas Use Only  
DIVISION OF OIL & GAS  
DEPARTMENT OF ENERGY

Fee(s) paid: 121 Well Work Permit 42 Reclamation Fund 121 WPCP  
 plat 121 WW-9 121 WW-2B 121 Bond 50 Blanket Agn

(Type)

30078  
25  
1531

**RECEIVED**  
AUG 05 1988

DIVISION OF OIL & GAS 3)  
DEPARTMENT OF ENERGY

Date: August 1, 1988  
Operator's well number  
Rowland Land Co. A-54X, GW 2001  
API Well No: 47 - 081 - 0832  
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  
(b) Name Attn: David R. Pollitt  
Address \_\_\_\_\_  
(c) Name \_\_\_\_\_  
Address \_\_\_\_\_

5) (a) Coal Operator:  
Name Peabody Coal Company / 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 R. Pollitt  
Address \_\_\_\_\_

6) Inspector Rodney Dillon  
Address P. O. Box 1526  
Sophia, WV 25921  
Telephone (304)-683-3989/465-1911

(c) Coal Lessee with Declaration  
Name Peabody Coal Company / Toby Waller  
Address P. O. Box 1233  
Charleston, WV 25324

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)  
XX \_\_\_\_\_ 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 4 day of August, 1988

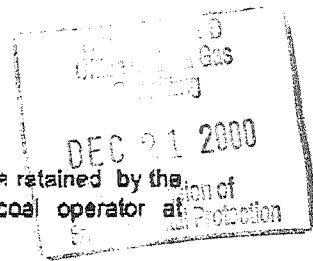
*Donald J. Bay*  
\_\_\_\_\_  
My commission expires June 11, 1989 Notary Publ

WR-38  
DATE:

API#

47-081-0832

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



AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE IN TRIPLICATE. one copy mailed to the Division, one copy to be retained by the Well Operator and the third copy (and extra copies if required) should be mailed to each coal operator at their respective addresses.

Farm name: Rowland Land Management Operator Well No.: Rowland #A548

LOCATION: Elevation: 1627.72 Quadrangle: Pilot Knob  
District: Munsh Fork County: Raleigh  
Latitude: \_\_\_\_\_ Feet South of \_\_\_\_\_ Deg. \_\_\_\_\_ Min. \_\_\_\_\_ Sec.  
Longitude: \_\_\_\_\_ Feet West of \_\_\_\_\_ Deg. \_\_\_\_\_ Min. \_\_\_\_\_ Sec.

Well Type: OIL \_\_\_\_\_ GAS

Company: Clower Well Services Coal Operator Peabody Coal Co  
Rt 3 Box 27A or Owner PO Box 1133  
Salem WV 26424 Charleston WV 25324

Agent: John Clower Coal Operator or Owner SAME

Permit Issued Date: 7-24-2000

AFFIDAVIT

STATE OF WEST VIRGINIA,  
County of Raleigh ss:

Kevin Clower and Randall Riddle being first duly sworn according to law depose and say that they are experienced in the work of plugging and filling oil and gas wells and were employed by the above named well operator, and participated in the work of plugging and filling the above well, and Rick Campbell Oil and Gas Inspector representing the Director, say that said work was commenced on the 11th day of Oct, 2000, and that the well was plugged and filled in the following manner:

TYPE	FROM	TO	PIPE REMOVED	LEFT
Gel	6550'	5396'		All 16" csy 40'
CMT	5396'	5288'		All 11 3/4" csy 430'
Gel	5288'	3811'		All 8 7/8" csy 2769'
CMT	3811'	3703'		
Gel	3703'	2824'		
CMT	2824'	2716'		
Gel	2716'	1710'		
CMT	1710'	1602'		

Description of monument: 7" csy w/ 10# 36" above surface and that the work of plugging and filling said well was completed on the 11th day of Oct, 2000

And further deponents saith not.

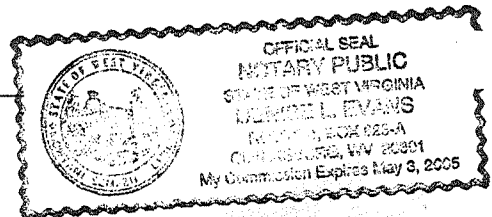
Randall E Riddle

Sworn and subscribe before me this 14th day of December, 2000

My commission expires: 4/3/2003

Notary Public

Oil and Gas Inspector: Richard A. Campbell



JAN 5 2001

Gel	1602'	945'		
CMT	945'	745'	All 5 1/2" csy	5639' 5 1/2" csy
Gel	745'	100'		
CMT	100'	0'		

WAL 0832