

State of West Virginia  
Department of Environmental Protection - Office of Oil and Gas  
Well Operator's Report of Well Work

API 47 - 085 - 10285 County Ritchie District Union  
Quad Oxford Pad Name OXF 122 Field/Pool Name \_\_\_\_\_  
Farm name Richard L & Sheryl A Ray Well Number 514083  
Operator (as registered with the OOG) EQT Production Company  
Address 625 Liberty Ave. EQT Plaza, Suite 1700 City Pittsburgh State PA Zip 15222

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey  
Top hole Northing 4,331,467.90 Easting 514,591.79  
Landing Point of Curve Northing 4,331,072.53 Easting 515,977.34  
Bottom Hole Northing 4,329,463.36 Easting 516,561.92

Elevation (ft) 1111 GL Type of Well  New  Existing Type of Report  Interim  Final  
Permit Type  Deviated  Horizontal  Horizontal 6A  Vertical Depth Type  Deep  Shallow  
Type of Operation  Convert  Deepen  Drill  Plug Back  Redrilling  Rework  Stimulate  
Well Type  Brine Disposal  CBM  Gas  Oil  Secondary Recovery  Solution Mining  Storage  Other \_\_\_\_\_  
Type of Completion  Single  Multiple Fluids Produced  Brine  Gas  NGL  Oil  Other \_\_\_\_\_  
Drilled with  Cable  Rotary

Drilling Media Surface hole  Air  Mud  Fresh Water Intermediate hole  Air  Mud  Fresh Water  Brine  
Production hole  Air  Mud  Fresh Water  Brine

Mud Type(s) and Additive(s)  
Water based mud & Synthetic Oil Base Mud 12.5ppg, aliphatic based non-aqueous drilling fluid, barium sulfate, calcium chloride, organophylic clay, quaternary ammonium clay, gilsonite, blended emulsifier, wetting agent, blended graphite, hydrated lime, calcium carbonate, ground walnut shells, fibrous cellulose

Date permit issued 6/9/2016 Date drilling commenced 8/24/16 Date drilling ceased 11/25/16  
Date completion activities began 6/6/2017 Date completion activities ceased 6/17/2017  
Verbal plugging (Y/N) N Date permission granted N/A Granted by N/A

Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug

Freshwater depth(s) ft 259' Open mine(s) (Y/N) depths N  
Salt water depth(s) ft N/A Void(s) encountered (Y/N) depths N  
Coal depth(s) ft 952' Cavern(s) encountered (Y/N) depths N  
Is coal being mined in area (Y/N) N

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APPROVED  
NAME: Michael Self  
DATE: 10/25/17  
Reviewed by: \_\_\_\_\_

API 47-085 - 10285 Farm name Richard L & Sheryl A Ray Well number 514083

CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade wt/ft	Basket Depth(s)	Did cement circulate (Y/N) * Provide details below*
Conductor	24"	20"	40'	NEW	A-500 78.5LB/FT	NONE	Y
Surface	17.5"	13.375"	398'	NEW	J-55 54.5LB/FT	175'	Y
Coal							
Intermediate 1	12.375" & 12.25"	9.625"	2994.5	NEW	A-500 40LB/FT	NONE	Y
Intermediate 2							
Intermediate 3							
Production	8.5"	5.5"	15574'	NEW	P-110 20LB/FT	NONE	N
Tubing							
Packer type and depth set							

Comment Details \_\_\_\_\_

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft <sup>3</sup> /sks)	Volume (ft <sup>3</sup> )	Cement Top (MD)	WOC (hrs)
Conductor	CLASS A	38	15.6	1.18	45.0	0	8+
Surface	CLASS A	410	15.6	1.20	492.0	0	8
Coal							
Intermediate 1	Class A / Class A	885 / 195	15.6 / 15.6	1.18 / 1.20	1278.3	0	8
Intermediate 2							
Intermediate 3							
Production	CLASS A / CLASS H	400 / 885	15.2 / 15.6	1.12 / 1.85	2085.3	7400	72+
Tubing							

Drillers TD (ft) 15576' Loggers TD (ft) N/A  
 Deepest formation penetrated MARCELLUS Plug back to (ft) N/A  
 Plug back procedure N/A

Kick off depth (ft) 4474'

Check all wireline logs run  caliper  density  deviated/directional  induction  
 neutron  resistivity  gamma ray  temperature  sonic

Well cored  Yes  No  Conventional  Sidewall Were cuttings collected  Yes  No

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING \_\_\_\_\_  
 CONDUCTOR- NONE  
 SURFACE- RAN AT LEAST EVERY 500' FEET  
 INTERMEDIATE- RAN AT LEAST EVERY 500' FEET  
 PRODUCTION- COMPOSITE BODY CENTRALIZERS RAN EVERY JOINT FROM SHOE TO KOP

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WAS WELL COMPLETED AS SHOT HOLE  Yes  No DETAILS \_\_\_\_\_

WAS WELL COMPLETED OPEN HOLE?  Yes  No DETAILS \_\_\_\_\_

WERE TRACERS USED  Yes  No TYPE OF TRACER(S) USED \_\_\_\_\_





API 47- 085 - 10285 Farm name Richard L & Sheryl A Ray Well number 514083

Drilling Contractor \_\_\_\_\_  
Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Logging Company \_\_\_\_\_  
Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Logging Company PROFESSIONAL DIRECTIONAL  
Address 103 SUDS RUN ROAD City MT. CLARE State WV Zip 26408

Cementing Company ALLIED SERVICES  
Address 116 KIMMEL SCHOOL ROAD City SHELOCTA State PA Zip 15773

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## OXF 122 Well #514083 Final Formations API#47-085-10285

Formation Name	Final Top MD (ftGL) (ft)	Final Top (TVD) (ft)	Final Btm MD (ftGL) (ft)	Final Btm (TVD) (ft)
SAND/SHALE	1	1	939	939
COAL	939	939	942	942
SAND/SHALE	942	942	1,698.00	1,697.90
MAXTON	1,698.00	1,697.90	1,881.00	1,880.90
BIG LIME	1,881.00	1,880.90	2,156.00	2,155.90
WEIR	2,156.00	2,155.90	2,370.00	2,369.90
BEREA	2,370.00	2,369.90	2,381.00	2,380.90
GANTZ	2,381.00	2,380.90	2,475.00	2,474.90
50F	2,475.00	2,474.90	2,631.00	2,630.90
GORDON	2,631.00	2,630.90	2,894.00	2,893.90
BAYARD	2,894.00	2,893.90	3,214.00	3,213.90
WARREN	3,214.00	3,213.90	3,272.00	3,271.90
SPEECHLEY	3,272.00	3,271.90	3,771.00	3,770.90
BALLTOWN A	3,771.00	3,770.90	4,349.00	4,348.90
RILEY	4,349.00	4,348.90	4,689.00	4,684.80
BENSON	4,689.00	4,684.80	5,021.00	4,963.10
ALEXANDER	5,021.00	4,963.10	8,449.00	6,144.00
SONYEA	8,449.00	6,144.00	8,833.00	6,280.10
MIDDLESEX	8,833.00	6,280.10	8,961.00	6,329.80
GENESSEE	8,961.00	6,329.80	9,315.00	6,462.80
GENESE0	9,315.00	6,462.80	9,479.00	6,509.30
TULLY	9,479.00	6,509.30	9,570.00	6,530.10
HAMILTON	9,570.00	6,530.10	9,629.00	6,540.90
MARCELLUS	9,629.00	6,540.90	15,576.00	6,622.70

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**OXF122**  
**WV 514083**  
**EQT PRODUCTION COMPANY**

4805'  
 TOP HOLE LATITUDE 39°10'00"  
 BOTTOM HOLE LATITUDE 39°07'30"

LONGITUDE 80°47'30"  
 3,978'

ROYALTY OWNERS			
ADELE McDOUGAL ET AL	2000 AC.±	LEASE NO. 109481	
MICHAEL M. MCKENZIE ET AL	199.75 AC.±	LEASE NO. 987351	
JAMES L. REED ET AL	40 AC.±	LEASE NO. 999844	
JAMES L. REED ET AL	40 AC.±	LEASE NO. 999845	

A	RICHARD L. & SHERYL A. RAY	255.5 ACRES±	R-U-TM-32-07
B	KENNETH P. ADAMS	47.15 ACRES±	R-U-TM-32-04
C	COASTAL FOREST RESOURCES CO. d/b/a COASTAL TIMBERLANDS CO.	145.192 ACRES±	D-SW-TM-16-04
D	JEFFREY SPERRY	72.86 ACRES±	D-SW-TM-16-4.1
E	RANDALL SR. & DEBBY FARLEY	42.92 ACRES±	D-SW-TM-16-8.6
F	COASTAL FOREST RESOURCES CO. d/b/a COASTAL TIMBERLANDS CO.	416.61 ACRES±	D-SW-TM-16-8.2
G	MARVIN EDWARDS JR.	94.5 ACRES±	D-SW-TM-18-02
H	MARVIN EDWARDS JR.	1 ACRE±	D-SW-TM-18-04
I	PAUL (LIFE) & JAMES MCKENZIE	228.75 ACRES±	D-SW-TM-18-05
J	RAYMOND A. TREWHELLA	35.5 ACRES±	D-SW-TM-18-12
K	JAMES MCKENZIE	57 ACRES±	R-U-TM-33-03
L	RANDALL SHORT	184.66 ACRES±	R-U-TM-32-15
M	SANDRA ADAMS	100 ACRES±	D-SW-TM-18-11
N	CHARLES & JUDITH WRIGHT	25 ACRES±	D-SW-TM-18-10
O	CHARLES & JUDITH WRIGHT	30.25 ACRES±	D-SW-TM-18-09
P	JEFFERY & JULIA SPERRY	53.44 ACRES±	D-SW-TM-18-14
Q	RUSSELL & CAROL WICK	30.05 ACRES±	R-U-TM-38-01
R	JAMES MCKENZIE	46.7 ACRES±	R-U-TM-33-01
S	BOBBY RIDDLE ET AL	188.88 ACRES±	R-U-TM-32-14
T	EQT PRODUCTION COMPANY	78.3 ACRES±	R-U-TM-32-06
U	JIMMIE JR. & SANDRA TRENT	76 ACRES±	R-U-TM-32-05
V	STEVEN P. ADAMS	7.3 ACRES±	D-SW-TM-18-03
W	MANSHIELD LEESON	189 ACRES±	D-SW-TM-16-09
X	CHARLES ADAMS	109.5 ACRES±	D-SW-TM-18-06
Y	JAMES MCKENZIE	3.43 ACRES±	R-U-TM-33-02

**NOTES ON SURVEY**

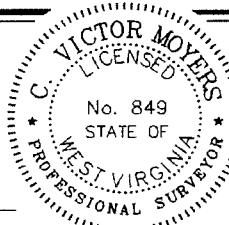
1. NO WATER WELLS WERE FOUND WITHIN 250' OF PROPOSED GAS WELL. NO AGRICULTURAL BUILDINGS ≥ 2500 SQ. FT. OR DWELLINGS WERE FOUND WITHIN 625' OF THE CENTER OF PROPOSED WELL PAD.
2. WELL SPOT CIRCLE & TOPO MARK SCALE IS 1"=2000'.
3. AS DRILLED INFORMATION PROVIDED BY EQT.

**AS DRILLED COORDINATES  
(OXF122 H9)**

(S.P.C. NORTH ZONE) (UTM/M) ZONE 17 NORTH)  
 NAD27 S.P.C.(FT) N. 233,051.21 E. 1,622,340.01  
 NAD27 GEO. LAT.(N) 39.152179 LONG.(W) 80.831346  
 NAD83 UTM (M) N. 4,331,467.90 E. 514,591.79  
**LANDING POINT**  
 NAD27 S.P.C.(FT) N. 231,677.82 E. 1,626,565.19  
 NAD27 GEO. LAT.(N) 39.128592 LONG.(W) 80.815325  
 NAD83 UTM (M) N. 4,331,072.53 E. 515,977.34  
**BOTTOM HOLE**  
 NAD27 S.P.C.(FT) N. 226,365.09 E. 1,628,695.45  
 NAD27 GEO. LAT.(N) 39.114080 LONG.(W) 80.806601  
 NAD83 UTM (M) N. 4,329,463.36 E. 516,561.92



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 DIVISION OF ENVIRONMENTAL PROTECTION.



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.  
 DATE APRIL 05, 20 16  
 REVISED 04/11/16 & 12/06/16  
 OPERATORS WELL NO. WV 514083  
 API WELL NO. 47 - 085 - 10285H  
 STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 2500 FILE NO. 6811AD514083  
 HORIZONTAL & VERTICAL CONTROL DETERMINED BY DGPS (SURVEY GRADE TIE TO CORS NETWORK) SCALE SEE NOTE 2

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:  
 PAD ELEVATION 1,111' WATERSHED STRAIGHT FORK  
 DISTRICT UNION COUNTY RITCHIE QUADRANGLE OXFORD 7.5'  
 SURFACE OWNER RICHARD L. & SHERYL A. RAY ACREAGE 255.50±  
 ROYALTY OWNER HAUGHT FAMILY TRUST ET AL ACREAGE 402±  
 PROPOSED WORK:  
 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 MARCELLUS  
 ESTIMATED DEPTH 6,461'

WELL OPERATOR EQT PRODUCTION COMPANY DESIGNATED AGENT REX C. RAY  
 ADDRESS 115 PROFESSIONAL PLACE P.O. BOX 280 BRIDGEPORT, WV 26330 ADDRESS 115 PROFESSIONAL PLACE P.O. BOX 280 BRIDGEPORT, WV 26330

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**514083 47-085-10285-0000 - Stimulated Stages**

Stage Number	Stimulation Date	Ave Pump Rate (BPM)	Ave Treatment Pressure (PSI)	Max Breakdown Pressure (PSI)	ISIP (PSI)	Amount of Proppant (lbs)	Amount of Water (bbls)	Amount of Nitrogen/other (units)
Initiation Sleeve	6/6/2017	27	7,736	9,107	4,938	N/A	1,225	0
1	6/6/2017	80	8,795	9,126	3,388	451000	8,786	0
2	6/6/2017	88	8,716	9,031	3,665	448100	8,658	0
3	6/7/2017	39	8,219	9,794	4,639	700	4,245	0
3	6/7/2017	84	8,849	9,237	4,007	450200	8,642	0
4	6/7/2017	87	8,911	9,216	4,569	451900	8,827	0
5	6/7/2017	87	8,965	9,381	5,180	453500	8,648	0
6	6/8/2017	86	9,172	9,435	6,044	447500	8,601	0
7	6/8/2017	82	8,873	9,279	5,199	451200	9,141	0
8	6/8/2017	49	8,318	9,486	5,306	1200	2,827	0
8	6/8/2017	89	8,980	9,363	5,096	449000	8,555	0
9	6/9/2017	89	9,021	9,403	6,143	448500	8,608	0
10	6/9/2017	83	8,967	9,355	6,272	446900	9,064	0
11	6/10/2017	88	8,910	9,313	3,975	444500	8,739	0
12	6/10/2017	87	8,937	9,390	5,726	447900	9,052	0
13	6/10/2017	94	9,057	9,336	5,979	447800	8,446	0
14	6/11/2017	91	9,098	9,451	9,584	406700	7,875	0
14	6/11/2017	6	4,711	7,179	5,416	N/A	4,052	0
15	6/11/2017	90	8,631	8,919	4,088	449900	8,790	0
16	6/12/2017	86	8,814	9,255	3,830	447700	8,450	0
17	6/12/2017	86	8,522	9,249	4,028	445000	8,652	0
18	6/12/2017	91	8,404	8,622	3,691	448600	8,669	0
19	6/12/2017	96	8,290	8,547	3,735	448300	8,345	0
20	6/13/2017	97	8,322	8,705	4,463	447900	8,458	0
21	6/13/2017	92	8,967	9,332	4,430	450000	8,800	0
22	6/13/2017	93	8,648	9,117	4,568	449500	8,572	0
23	6/13/2017	95	8,433	8,712	4,704	453000	8,422	0
24	6/13/2017	89	8,107	8,565	4,214	450900	9,026	0
25	6/15/2017	97	8,105	8,558	5,797	451700	9,279	0
26	6/15/2017	96	8,284	8,699	5,827	453200	10,449	0
27	6/16/2017	98	8,141	8,374	4,334	447500	8,365	0
28	6/16/2017	98	8,241	8,619	5,039	447200	8,508	0
29	6/17/2017	91	8,442	8,958	3,900	446300	8,453	0

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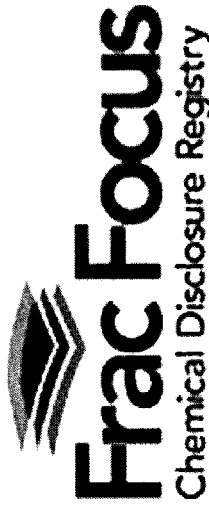
**514083 47-085-10285-0000 - Perforations**

Stage Number	Perforation Date	Top Perf Depth (ftKB)	Bottom Perf Depth (ftKB)	Number of Shots	Formation
Initiation Sleeve	12/14/2017	15,548	15,574	10	MARCELLUS
1	6/6/2017	15,391	15,513	32	MARCELLUS
2	6/6/2017	15,167	15,329	40	MARCELLUS
3	6/7/2017	14,967	15,129	40	MARCELLUS
3	6/7/2017	14,987	15,069	24	MARCELLUS
4	6/7/2017	14,767	14,929	40	MARCELLUS
5	6/7/2017	14,567	14,729	40	MARCELLUS
6	6/8/2017	14,367	14,529	40	MARCELLUS
7	6/8/2017	14,167	14,329	40	MARCELLUS
8	6/8/2017	13,967	14,129	40	MARCELLUS
8	6/8/2017	13,947	14,029	24	MARCELLUS
9	6/9/2017	13,747	13,909	40	MARCELLUS
10	6/9/2017	13,547	13,709	40	MARCELLUS
11	6/10/2017	13,347	13,509	40	MARCELLUS
12	6/10/2017	13,147	13,309	40	MARCELLUS
13	6/10/2017	12,947	13,109	40	MARCELLUS
14	6/10/2017	12,747	12,909	40	MARCELLUS
15	6/11/2017	12,547	12,709	40	MARCELLUS
16	6/12/2017	12,347	12,509	40	MARCELLUS
17	6/12/2017	12,147	12,309	40	MARCELLUS
18	6/12/2017	11,947	12,109	40	MARCELLUS
19	6/12/2017	11,747	11,909	40	MARCELLUS
20	6/12/2017	11,547	11,709	40	MARCELLUS
21	6/13/2017	11,347	11,509	40	MARCELLUS
22	6/13/2017	11,147	11,309	40	MARCELLUS
23	6/13/2017	10,947	11,109	40	MARCELLUS
24	6/13/2017	10,747	10,909	40	MARCELLUS
25	6/14/2017	10,547	10,709	40	MARCELLUS
26	6/15/2017	10,347	10,509	40	MARCELLUS
27	6/16/2017	10,147	10,309	40	MARCELLUS
28	6/16/2017	9,947	10,109	40	MARCELLUS
29	6/17/2017	9,747	9,909	40	MARCELLUS

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# Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date	6/6/2017
Job End Date	6/17/2017
State	West Virginia
County	Ritchie
API Number	47-085-10285-00-00
Operator Name	EQT Production
Well Name and Number	514083
Latitude	39.13217900
Longitude	-80.83134600
Datum	NAD83
Federal Well	NO
Indian Well	NO
True Vertical Depth	6,541
Total Base Water Volume (gall)	11,139,618
Total Base Non Water Volume	0



## Hydraulic Fracturing Fluid Composition:

Trade Name	Supplier	Purpose	Ingredients	Chemical Abstract Service Number (CAS #)	Maximum Ingredient Concentration in Additive (% by mass)**	Maximum Ingredient Concentration in HF Fluid (% by mass)**	Comments
Water	USWS	Carrier/Base Fluid					
				Listed Below			
LD-2250	Multi-Chem Group	Friction Reducer					
				Listed Below			

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Sand (Proppant)	USWS	Proppant							
LD-2550	Multi-Chem Group	Friction Reducer					Listed Below		
							Listed Below		
MC MX 5-3886	Multi-Chem Group	Specialty Brine					Listed Below		
							Listed Below		
AI-303	USWS	Acid Corrosion Inhibitor					Listed Below		
							Listed Below		
LGC-15	USWS	Water Gelling Agent					Listed Below		
							Listed Below		
NWA-200s	USWS	FR Activator					Listed Below		
							Listed Below		
AP ONE	USWS	Gel Breaker					Listed Below		
							Listed Below		
MC MX 8-2544	Multi-Chem Group	Live Culture - Nitrate Reducing Bacteria					Listed Below		
							Listed Below		
SI-1200S	USWS	Scale Inhibitor					Listed Below		

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\* Total Water Volume sources may include various types of water including fresh water, produced water, and recycled water  
\*\* Information is based on the maximum potential for concentration and thus the total may be over 100%  
\*\*\* If you are calculating a percentage of total ingredients do not add the water volume below the green line to the water volume above the green line

Note: For Field Development Products (products that begin with FDP), MSDS level only information has been provided.  
Ingredient information for chemicals subject to 29 CFR 1910.1200(i) and Appendix D are obtained from suppliers Material Safety Data Sheets (MSDS)

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Well Operator's Report of Well Work



Where energy meets innovation.

Well Number: 514083

API: 47 - 085 - 10285

Submission:  Initial  Amended

Notes: Original report sent on 9/8/2017 w/  
Mylar Plat  
resubmitting with revised Frac Focus

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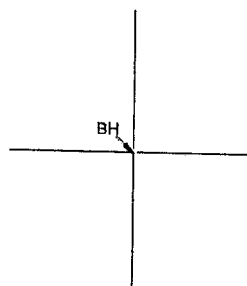


**OXF122**  
**WV 514083**  
**EQT PRODUCTION COMPANY**

4805'  
 TOP HOLE LATITUDE 39°10'00"  
 BOTTOM HOLE LATITUDE 39°07'30"

LONGITUDE 80°47'30"  
 3,978'

ROYALTY OWNERS		
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MICHAEL M. McKENZIE ET AL	199.75 AC.±	LEASE NO. 987351
JAMES L. REED ET AL	40 AC.±	LEASE NO. 988944
JAMES L. REED ET AL	40 AC.±	LEASE NO. 988946



A	RICHARD L. & SHERYL A. RAY	255.5 ACRES±	R-U-TM-32-07
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D	JEFFREY SPERRY	72.86 ACRES±	D-SW-TM-16-4.1
E	RANDALL SR. & DEBBY FARLEY	42.92 ACRES±	D-SW-TM-16-8.6
F	COASTAL FOREST RESOURCES CO. d/b/a COASTAL TIMBERLANDS CO.	416.61 ACRES±	D-SW-TM-16-8.2
G	MARVIN EDWARDS JR.	94.5 ACRES±	D-SW-TM-18-02
H	MARVIN EDWARDS JR.	1 ACRE±	D-SW-TM-18-04
I	PAUL (LIFE) & JAMES McKENZIE	228.75 ACRES±	D-SW-TM-18-05
J	RAYMOND A. TREWHELLA	35.5 ACRES±	D-SW-TM-18-12
K	JAMES McKENZIE	57 ACRES±	R-U-TM-33-03
L	RANDALL SHORT	184.66 ACRES±	R-U-TM-32-15
M	SANDRA ADAMS	100 ACRES±	D-SW-TM-18-11
N	CHARLES & JUDITH WRIGHT	25 ACRES±	D-SW-TM-18-10
O	CHARLES & JUDITH WRIGHT	30.25 ACRES±	D-SW-TM-18-09
P	JEFFERY & JULIA SPERRY	53.44 ACRES±	D-SW-TM-18-14
Q	RUSSELL & CAROL WICK	30.05 ACRES±	R-U-TM-38-01
R	JAMES McKENZIE	46.7 ACRES±	R-U-TM-33-01
S	BOBBY RIDDLE ET AL	188.88 ACRES±	R-U-TM-32-14
T	EQT PRODUCTION COMOANY	78.3 ACRES±	R-U-TM-32-06
U	JIMMIE JR. & SANDRA TRENT	76 ACRES±	R-U-TM-32-05
V	STEVEN P. ADAMS	7.3 ACRES±	D-SW-TM-18-03
W	MANSFIELD LEESON	189 ACRES±	D-SW-TM-16-09
X	CHARLES ADAMS	109.5 ACRES±	D-SW-TM-18-06
Y	JAMES McKENZIE	3.43 ACRES±	R-U-TM-33-02

**NOTES ON SURVEY**

1. NO WATER WELLS WERE FOUND WITHIN 250' OF PROPOSED GAS WELL. NO AGRICULTURAL BUILDINGS ≥ 2500 SQ. FT. OR DWELLINGS WERE FOUND WITHIN 625' OF THE CENTER OF PROPOSED WELL PAD.
2. WELL SPOT CIRCLE & TOPO MARK SCALE IS 1"=2000'.
3. AS DRILLED INFORMATION PROVIDED BY EQT.

RECEIVED  
 Office of Oil and Gas

SEP 14 2017

WV Department of  
 Environmental Protection

**AS DRILLED COORDINATES**  
**(OXF122 H9)**

(S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)

NAD'27 S.P.C.(FT) N. 233,051.21 E. 1,622,340.01  
 NAD'27 GEO. LAT-(N) 39.132179 LONG-(W) 80.81346  
 NAD'83 UTM (M) N. 4,331,467.90 E. 514,591.79

**LANDING POINT**

NAD'27 S.P.C.(FT) N. 231,677.82 E. 1,626,865.19  
 NAD'27 GEO. LAT-(N) 39.128592 LONG-(W) 80.815325  
 NAD'83 UTM (M) N. 4,331,072.53 E. 515,977.34

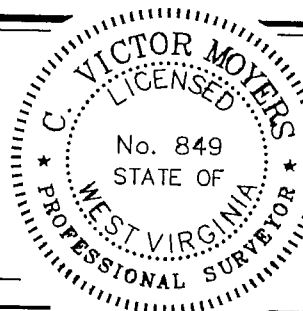
**BOTTOM HOLE**

NAD'27 S.P.C.(FT) N. 226,365.09 E. 1,628,695.45  
 NAD'27 GEO. LAT-(N) 39.114080 LONG-(W) 80.808601  
 NAD'83 UTM (M) N. 4,329,463.36 E. 516,561.92

**SLS**  
**Land & Energy Development**  
*Solutions from the ground up.*  
 P.O. Box 150 • 12 Vanhorn Drive • Glenville, WV 26351 • (304) 462-5934  
 www.slsenergy.com

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 DIVISION OF ENVIRONMENTAL PROTECTION.

P.S. 849 *C. Victor Moyers*



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.  
 DATE APRIL 05, 20 16  
 REVISED 04/11/16 & 12/06/16  
 OPERATORS WELL NO. WV 514083  
 API WELL NO. 47 - 085 - 10285H  
 STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 2500 FILE NO. 6811AD514083  
 HORIZONTAL & VERTICAL CONTROL DETERMINED BY DGPS (SURVEY GRADE TIE TO CORS NETWORK) SCALE SEE NOTE 2

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

WELL TYPE: OIL    GAS X LIQUID INJECTION    WASTE DISPOSAL    IF "GAS" PRODUCTION X STORAGE    DEEP    SHALLOW X

**OXF122**  
**WV 514083**  
**EQT PRODUCTION COMPANY**

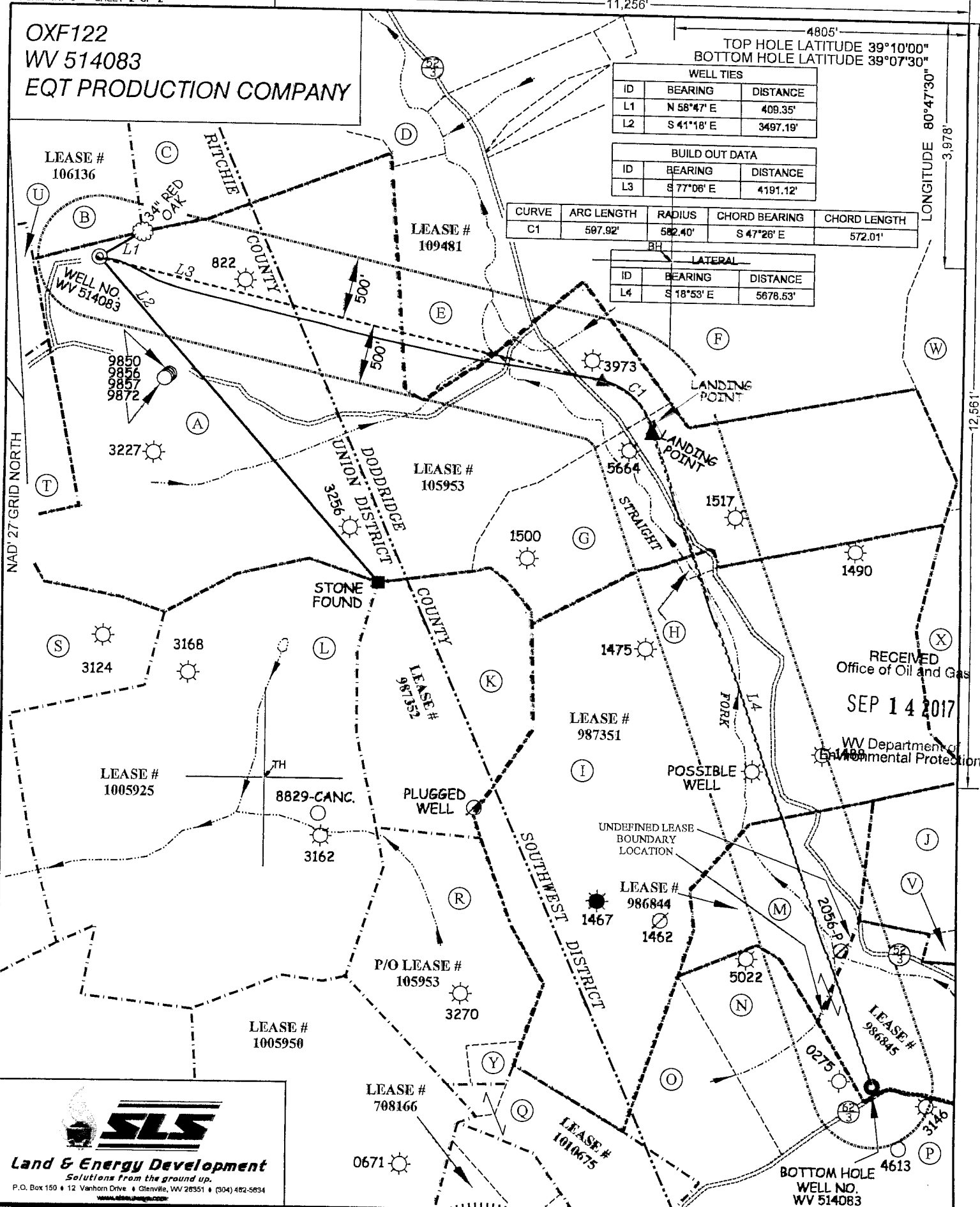
4805'  
 TOP HOLE LATITUDE 39°10'00"  
 BOTTOM HOLE LATITUDE 39°07'30"

WELL TIES		
ID	BEARING	DISTANCE
L1	N 58°47' E	408.35'
L2	S 41°18' E	3497.19'

BUILD OUT DATA		
ID	BEARING	DISTANCE
L3	S 77°06' E	4191.12'

CURVE	ARC LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
C1	597.92'	582.40'	S 47°28' E	572.01'

LATERAL		
ID	BEARING	DISTANCE
L4	S 18°53' E	5678.53'



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**AS DRILLED COORDINATES**  
 (OXF122 H9)  
 (S.P.C. NORTH ZONE) (UTM/M) ZONE 17 NORTH)  
 NAD27 S.P.C. (FT) N. 233,051.21 E. 1,622,340.01  
 NAD27 GEO. LAT. (N) 39.132179 LONG. (W) 80.831346  
 NAD83 UTM (M) N. 4,331,467.90 E. 514,591.79  
 LANDING POINT:  
 NAD27 S.P.C. (FT) N. 231,677.82 E. 1,626,865.19

**VICTOR MOYERS**  
 LICENSED  
 No. 849  
 STATE OF WV

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.  
**LEGEND**  
 LEASE LINE  
 SURFACE LINE