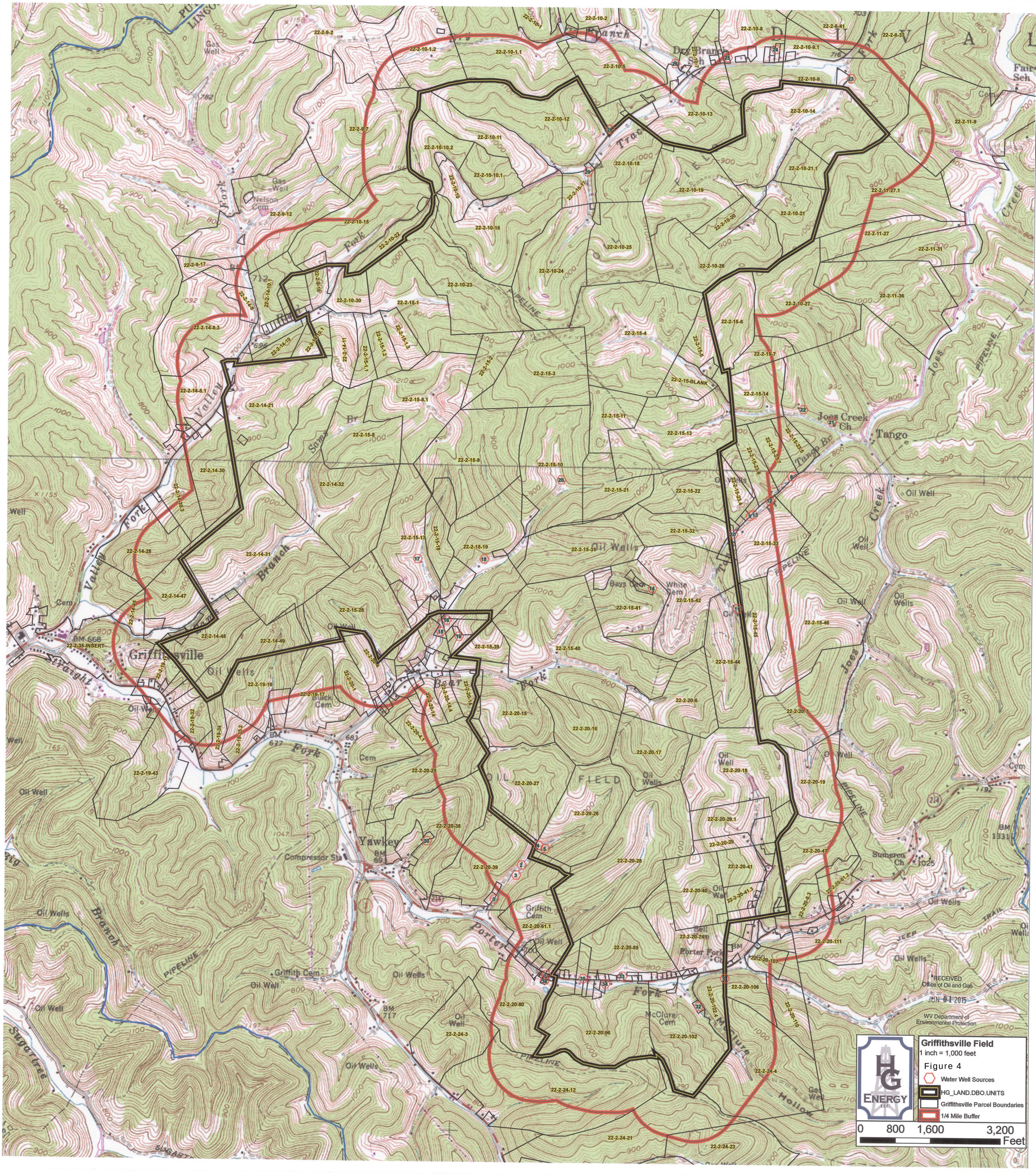

Griffithsville Field
1 inch = 1,000 feet
Figure 4
Water Well Sources
HG_LAND.DBO.UNITS
Griffithsville Parcel Boundaries
1/4 Mile Buffer
0 800 1,600 3,200
Feet
HG ENERGY LLC
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Environmental Protection
Griffithsville
Yawkey
Tango
Oil Wells
Oil Well
Gas Well
Compressor Sta
Nelson Cem
Griffith Cem
Black Cem
McClure Cem
Porter Fork Ch
Joes Creek Ch
Sumerco Ch
Bays Cem
White Cem
Dry Branch Sch
Fairview Sch
Tango Br
Joes Creek
Sugartree
Straight
Valley Fork
Sams Br
Bear Fork
Porter Fork
Dry Fork
Two Mile
Hollow
Branch
PIPELINE
TRAIL
JEEP
BM 668
BM 677
BM 717
BM 1331
22-2-35-INSERT
22-2-9-2
22-2-9-7
22-2-9-12
22-2-9-17
22-2-10-1
22-2-10-1.1
22-2-10-1.2
22-2-10-2
22-2-10-5
22-2-10-8
22-2-10-9
22-2-10-9.1
22-2-10-10
22-2-10-10.1
22-2-10-10.2
22-2-10-11
22-2-10-12
22-2-10-13
22-2-10-14
22-2-10-15
22-2-10-16
22-2-10-17
22-2-10-18
22-2-10-19
22-2-10-20
22-2-10-21
22-2-10-21.1
22-2-10-22
22-2-10-23
22-2-10-24
22-2-10-25
22-2-10-26
22-2-10-27
22-2-10-30
22-2-11-9
22-2-11-27
22-2-11-27.1
22-2-11-31
22-2-11-36
22-2-6-37
22-2-6-41
22-2-9-18
22-2-14-8
22-2-14-8.1
22-2-14-8.3
22-2-14-10
22-2-14-10.1
22-2-14-21
22-2-14-28
22-2-14-30
22-2-14-30.3
22-2-14-31
22-2-14-32
22-2-14-45
22-2-14-47
22-2-14-48
22-2-14-49
22-2-15-1
22-2-15-1.1
22-2-15-1.2
22-2-15-1.3
22-2-15-2
22-2-15-3
22-2-15-4
22-2-15-5
22-2-15-6
22-2-15-7
22-2-15-8
22-2-15-8.1
22-2-15-9
22-2-15-10
22-2-15-11
22-2-15-12
22-2-15-13
22-2-15-14
22-2-15-17
22-2-15-18
22-2-15-19
22-2-15-21
22-2-15-22
22-2-15-23.1
22-2-15-23.4
22-2-15-23.5
22-2-15-23.6
22-2-15-28
22-2-15-31
22-2-15-32
22-2-15-33
22-2-15-39
22-2-15-40
22-2-15-41
22-2-15-42
22-2-15-44
22-2-15-45
22-2-15-46
22-2-15-BLANK
22-2-19-16
22-2-19-17
22-2-19-32
22-2-19-34
22-2-19-35.2
22-2-19-43
22-2-20-1
22-2-20-4
22-2-20-4.1
22-2-20-6
22-2-20-7
22-2-20-14
22-2-20-14.4
22-2-20-15
22-2-20-16
22-2-20-17
22-2-20-18
22-2-20-19
22-2-20-25
22-2-20-26
22-2-20-27
22-2-20-28
22-2-20-29
22-2-20-29.1
22-2-20-38
22-2-20-39
22-2-20-40
22-2-20-41
22-2-20-41.3
22-2-20-47
22-2-20-61.1
22-2-20-74
22-2-20-80
22-2-20-85
22-2-20-96
22-2-20-102
22-2-20-106
22-2-20-107
22-2-20-110
22-2-20-111
22-2-20-192.4
22-2-24-3
22-2-24-4
22-2-24-12
22-2-24-21
22-2-24-23
22-2-20-8.3
22-2-20-81.2
22-2-20-41.3
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36

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Figure No. 5

GRIFFITHSVILLE BEREA STRUCTURE MAP

Duval Dist., Lincoln Co.

Unit #2 Boundary
Unit Boundary

1500'

2-10-15
1973 MAP

Figure 5

Griffithsville Field
Berea Thickness

1 inch = 1,000 feet

- Berea_Thickness_10foot
- Berea_Thickness_5foot
- Berea_Thickness_1foot
- Data_Points
- HGE Unit Boundaries

0 800 1,600 3,200 Feet

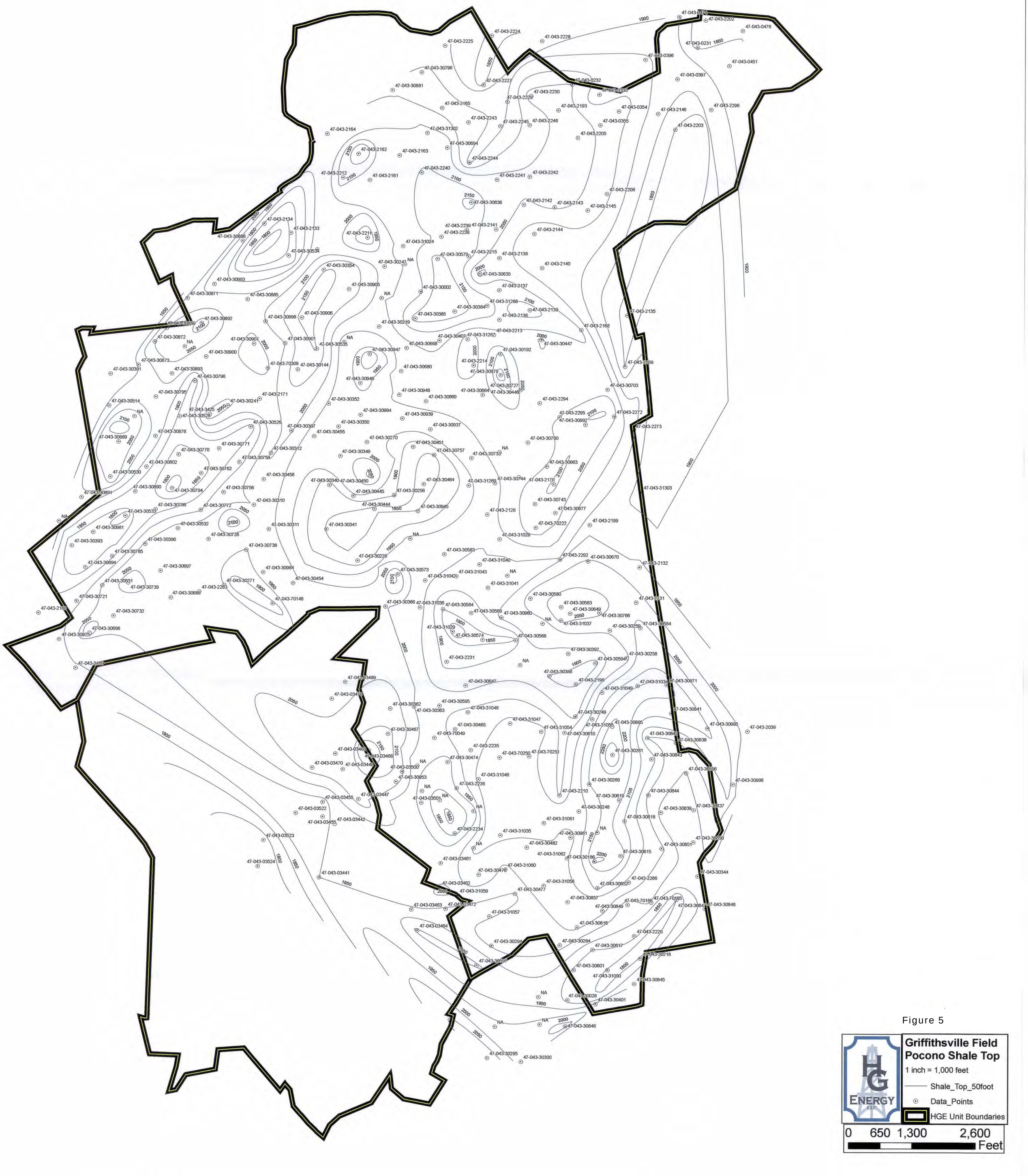

Griffithsville Field
Pocono Shale Top
1 inch = 1,000 feet
Shale_Top_50foot
Data_Points
HGE Unit Boundaries
0 650 1,300 2,600
Feet
HG ENERGY LLC

Figure 5

Figure 5

Griffithsville Field
Pocono Shale Thickness

1 inch = 1,000 feet

Pocono_Thickness_20foot

Pocono_Thickness_10foot

Data_Points

HGE Unit Boundaries

0 875 1,750 3,500 Feet

Weatherford

Measured Depth
Photo Density
Compensated Neutron

COMPANY	HG Energy, LLC
WELL	Thomas Fowler 250
FIELD	Griffithsville
PROVINCE/COUNTY	Lincoln County
COUNTRY/STATE	U.S.A. / West Virginia
LOCATION	Griffithsville 7.5' Quadrangle
PERMIT NUMBER	Lat: 38°13' 46.7" Long: 81° 57' 15.2"

FIELD PRINT

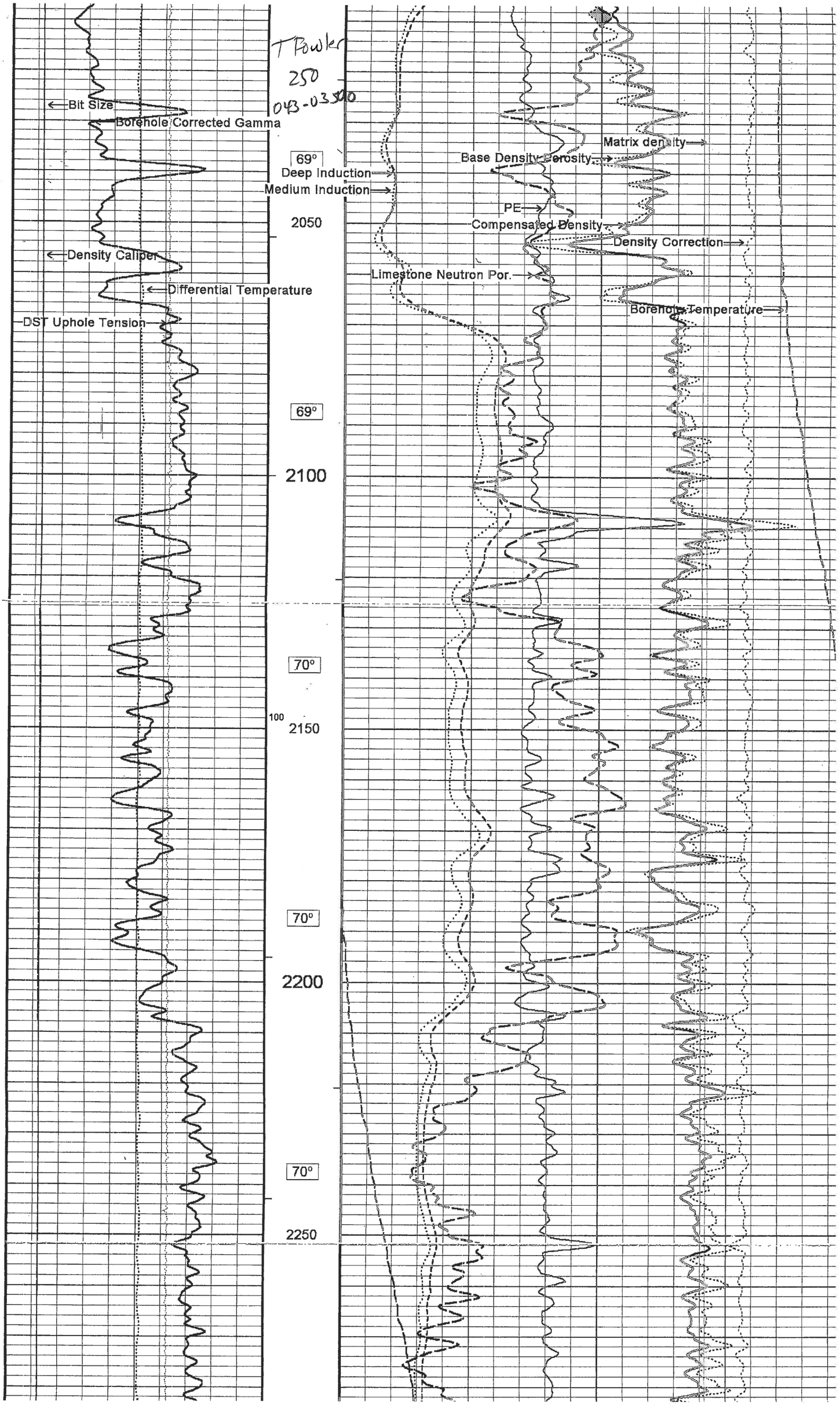
SEC	TWP	RGE	Other Services
Latitude			Data Pack
Longitude			Temperature
API Number	47-043-03500		Gamma Ray

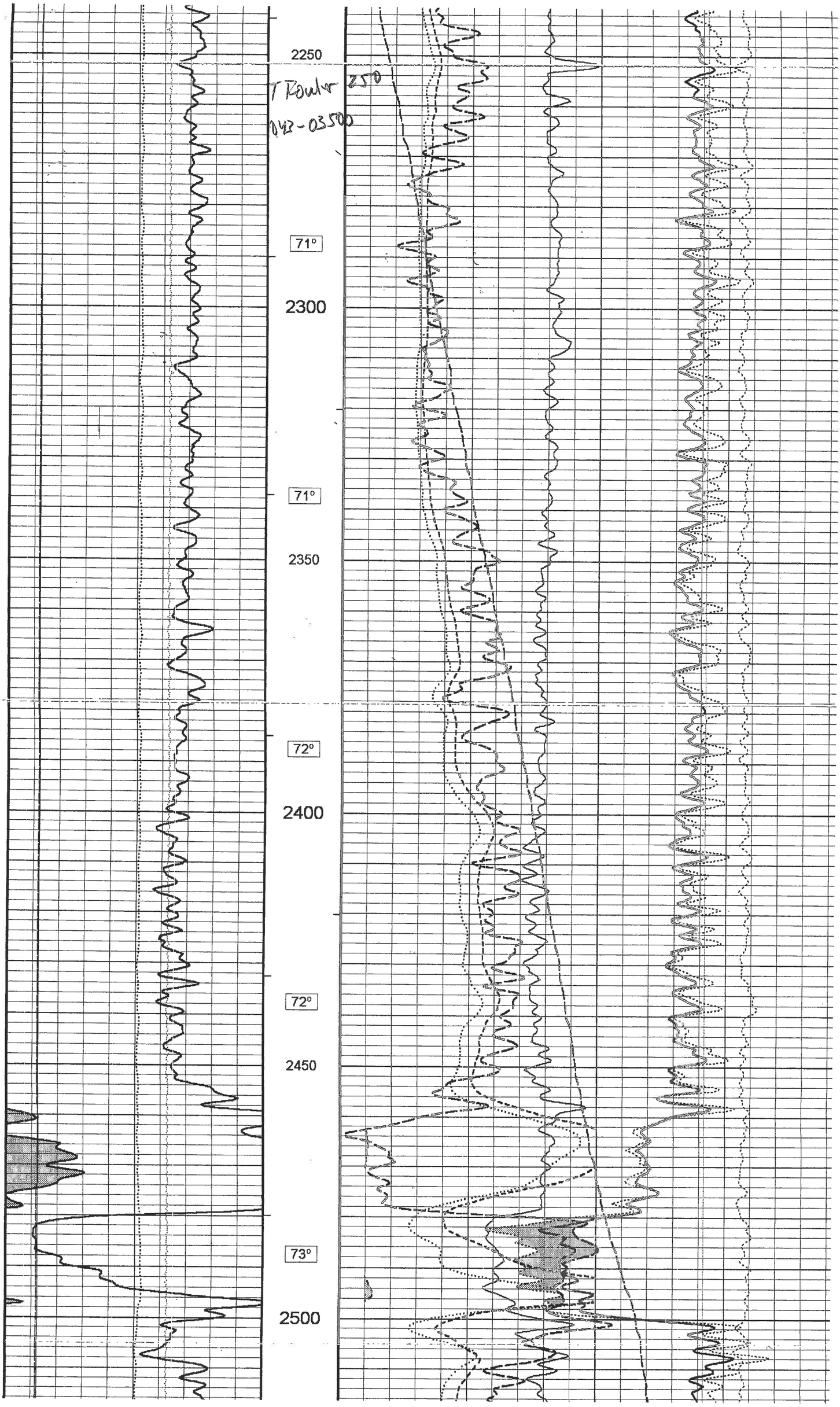
Permanent Datum Ground Level, Elevation 1003 feet
Log Measured From KB
Drilling Measured From KB @ 8 feet

Elevations:	feet
KB	1011.00
DF	1011.00
GL	1003.00

Date	14-Jul-2015			
Run Number	One			
Service Order	7884-155665580			
Depth Driller	2629.00	feet		
Depth Logger	2634.00	feet		
First Reading	2634.00	feet		
Last Reading	0.00	feet		
Casing Driller	551.00	feet		
Casing Logger	556.00	feet		
Bit Size	6.250	inches		
Hole Fluid Type	Brine			
Density / Viscosity	---	---		
PH / Fluid Loss	---	---		
Sample Source	Mud Pit			
Rm @ Measured Temp	0.20 @ 68.0	ohm-m		
Rmf @ Measured Temp	0.15 @ 68.0	ohm-m		
Rmc @ Measured Temp	0.25 @ 68.0	ohm-m		
Source Rmf / Rmc	Calc	Calc		
Rm @ BHT	0.18 @ 74.0	ohm-m		
Time Since Circulation	3 Hours			
Max Recorded Temp	74.00	deg F		
Equipment / Base	13048	Ytown		
Recorded By	Miles Wilkins			
Witnessed By	Dustin Hendershot			

Fig No 4


T Bowler
250
043-03300
Bit Size
Borehole Corrected Gamma
Density Caliper
Differential Temperature
DST Uphole Tension
69°
Deep Induction
Medium Induction
2050
69°
2100
70°
100
2150
70°
2200
70°
2250
Matrix density
Base Density Porosity
PE
Compensated Density
Density Correction
Limestone Neutron Por.
Borehole Temperature


2250
T Rouler 250
043-03500
71°
2300
71°
2350
72°
2400
72°
2450
73°
2500

Earthquake Epicenters of West Virginia

1824 through 2014

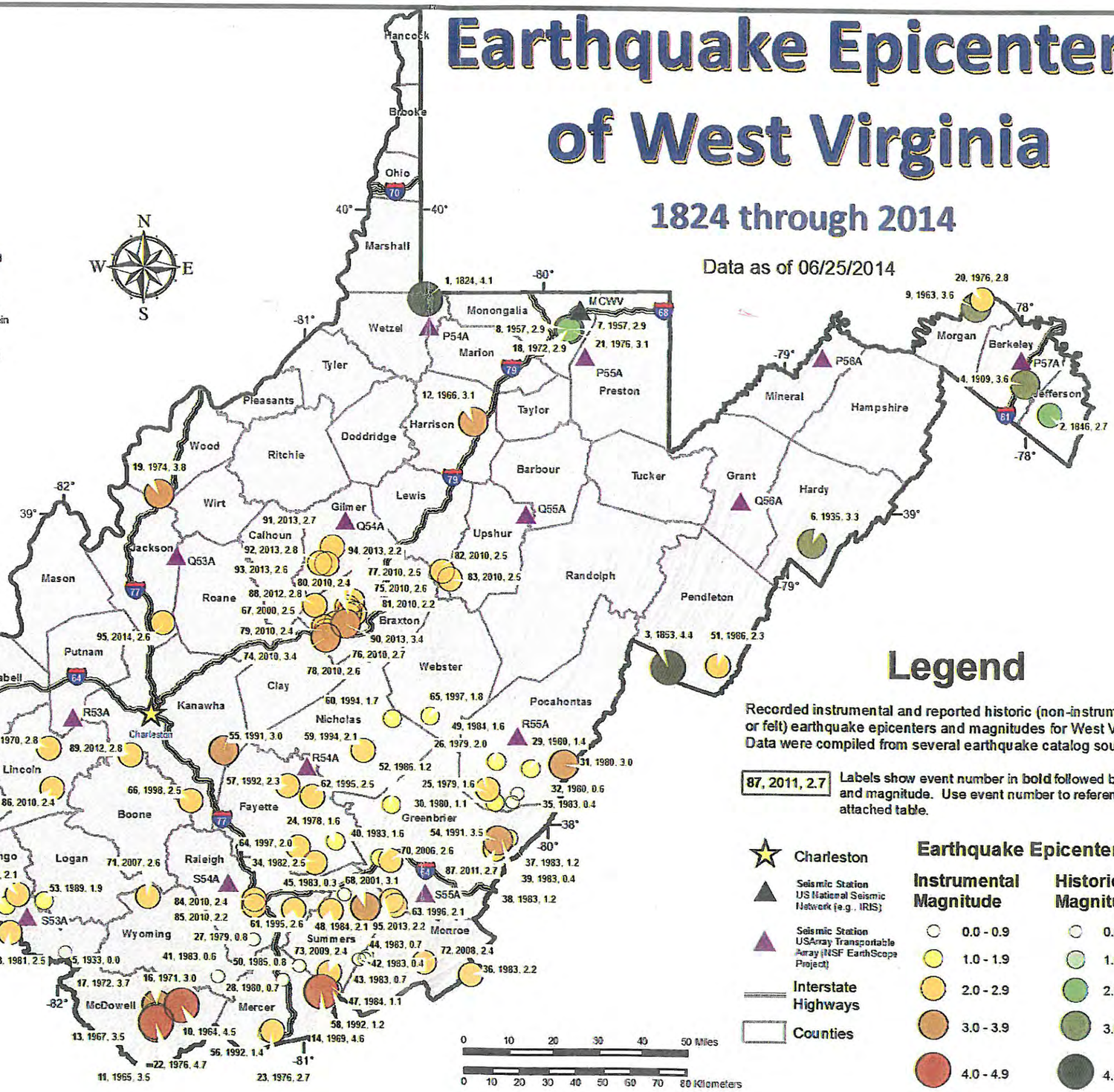
Data as of 06/25/2014

Publications Policy:

This publication represents interpretations of best available data made by professional geologists and geographers. As in all research work, professional interpretations may vary, and can change with advancements in both technology and data quality. This publication is offered as a service of the State of West Virginia; proper use of the information herein is the sole responsibility of the user.

Permission to reproduce this publication is granted if acknowledgement is given to the West Virginia Geological and Economic Survey.

Map Date: June 25, 2014
Projection: Transverse Mercator
Horizontal Datum: NAD 1983
Coordinate System: UTMz17n
Map scale for full 8.5" x 11" display: 1:2,000,000



Legend

Recorded instrumental and reported historic (non-instrumental or felt) earthquake epicenters and magnitudes for West Virginia. Data were compiled from several earthquake catalog sources.

87, 2011, 2.7 Labels show event number in bold followed by year and magnitude. Use event number to reference attached table.

- Charleston
- Seismic Station US National Seismic Network (e.g., IRIS)
- Seismic Station USArray Transportable Array (NSF EarthScope Project)
- Interstate Highways
- Counties

Earthquake Epicenters

Instrumental Magnitude	Historic Magnitude
0.0 - 0.9	0.0 - 0.9
1.0 - 1.9	1.0 - 1.9
2.0 - 2.9	2.0 - 2.9
3.0 - 3.9	3.0 - 3.9
4.0 - 4.9	4.0 - 4.9

WVGES GEOLOGY UNDERLIES IT ALL

West Virginia Geological and Economic Survey
Mont Chateau Research Center
1 Mont Chateau Road
Morgantown, WV 26508-8079
Phone: (304) 594-2331
www.wvgs.wvnet.edu

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WV Department of Environmental Protection

Event Num	WVQID	County	UTC Year	UTC Month	UTC Day	UTC HH	UTC MM	UTC SS	Latitude (N)	Longitude (W)	Magnitude	Recorded	MMI	Magnitude Type	Source 1	Source 2	USGS Link
1	18240715160	Wood	1824	7	15	16	20	0.00	39.70000	-80.50000	4.1	Historic	4.0	Mb	VTSO	NCEER	
2	18461019020	Jefferson	1846	10	19	2	0	0.00	39.30000	-77.90000	2.7	Historic	3.0	<NULL>	VTSO	<NULL>	
3	18530502140	Pendleton	1853	5	2	14	20	0.00	38.50000	-79.50000	4.4	Historic	5.5	<NULL>	NCEER	Wheeler I-2737	
4	19090402070	Berkeley	1909	4	2	7	25	0.00	39.40000	-78.00000	3.6	Historic	5.0	Mb	VTSO	Wheeler I-2737	
5	19330615010	Mingo	1933	6	15	1	14	36.80	37.56800	-81.97300	0.0	Historic	0.0	<NULL>	VTSO	<NULL>	
6	19351101080	Hardy	1935	11	1	8	30	0.00	38.90000	-78.90000	3.3	Historic	4.0	<NULL>	VTSO	NCEER	
7	19570307210	Monongalia	1957	3	7	21	5	9.00	39.60000	-79.90000	2.9	Historic	3.0	Mb	VTSO	<NULL>	
8	19570313210	Monongalia	1957	3	13	21	0	41.00	39.60000	-79.90000	2.9	Historic	3.0	Mb	VTSO	<NULL>	
9	19631010000	Morgan	1963	10	10	0	0	0.00	39.65500	-78.19700	3.6	Historic	0.0	<NULL>	Wheeler I-2737	<NULL>	
10	19641125020	McDowell	1964	11	25	2	50	5.00	37.40000	-81.50000	4.5	Instrumental	0.0	Mb	ANSS	<NULL>	
11	19650426150	McDowell	1965	4	26	15	26	19.70	37.32500	-81.60200	3.5	Instrumental	0.0	MbLg	VTSO	NCEER	
12	19660928000	Harrison	1966	9	28	0	0	0.00	39.30000	-80.30000	3.1	Instrumental	4.0	<NULL>	NCEER	<NULL>	
13	19671216120	McDowell	1967	12	16	12	23	33.40	37.36000	-81.60400	3.5	Instrumental	0.0	Mb	VTSO	NCEER	
14	19691120010	Mercer	1969	11	20	1	0	9.30	37.44900	-80.93200	4.6	Instrumental	6.0	MbLg	VTSO	NCEER	
15	19700811060	Lincoln	1970	8	11	6	14	25.50	38.23000	-82.05000	2.8	Instrumental	4.0	MbLg	VTSO	NCEER	
16	19710401050	McDowell	1971	4	1	5	5	11.00	37.40000	-81.60000	3.0	Instrumental	0.0	Mb	NCEER	ANSS	
17	19720109230	McDowell	1972	1	9	23	24	29.00	37.40000	-81.60000	3.7	Instrumental	0.0	MbLg	NCEER	ANSS	
18	19720912150	Monongalia	1972	9	12	15	17	13.70	39.60000	-79.90000	2.9	Historic	3.0	Mb	VTSO	NCEER	
19	19741020150	Wood	1974	10	20	15	13	55.60	39.06000	-81.60900	3.8	Instrumental	5.0	Mb	VTSO	NCEER	Further Info
20	19760130180	Morgan	1976	1	30	18	58	49.80	39.68300	-78.17000	2.8	Instrumental	0.0	Lg	USGS	ANSS	Further Info
21	19760506180	Monongalia	1976	5	6	18	46	8.10	39.60000	-79.90000	3.1	Historic	4.0	Mb	VTSO	NCEER	
22	19760619050	McDowell	1976	6	19	5	54	13.40	37.34400	-81.60200	4.7	Instrumental	5.0	Mb	VTSO	NCEER	Further Info
23	19760703200	Mercer	1976	7	3	20	53	45.80	37.32000	-81.13000	2.7	Instrumental	0.0	MbLg	VTSO	<NULL>	
24	19780814040	Fayette	1978	8	14	4	50	5.40	37.93900	-80.87400	1.6	Instrumental	0.0	Mc	VTSO	ANSS	
25	19790916090	Pocahontas	1979	9	16	9	39	22.60	38.09900	-80.24000	1.6	Instrumental	0.0	Mc	ANSS	<NULL>	
26	19790919000	Pocahontas	1979	9	19	0	45	57.40	38.11000	-80.24300	2.0	Instrumental	0.0	Mc	ANSS	<NULL>	
27	19791031080	Raleigh	1979	10	31	8	32	47.30	37.61700	-81.20700	0.8	Instrumental	0.0	Mc	ANSS	<NULL>	
28	19800410220	Mercer	1980	4	10	22	33	15.70	37.48700	-81.08600	0.7	Instrumental	0.0	Mc	VTSO	ANSS	
29	19800921100	Pocahontas	1980	9	21	10	2	46.30	38.17500	-80.07000	1.4	Instrumental	0.0	Mc	VTSO	ANSS	
30	19801016030	Pocahontas	1980	10	16	3	48	7.60	38.06600	-80.21500	1.1	Instrumental	0.0	Mc	VTSO	ANSS	
31	19801105210	Pocahontas	1980	11	5	21	48	14.20	38.18800	-79.93600	3.0	Instrumental	0.0	ML	ANSS	<NULL>	
32	19801125070	Pocahontas	1980	11	25	7	44	4.00	38.09500	-80.12300	0.6	Instrumental	0.0	Md	VTSO	ANSS	
33	19811130170	Mingo	1981	11	30	17	33	11.00	37.63000	-82.20000	2.5	Instrumental	0.0	Mc	VTSO	ANSS	
34	19820623160	Fayette	1982	6	23	16	17	34.10	37.87000	-80.95700	2.5	Instrumental	0.0	Md	VTSO	ANSS	
35	19830121050	Pocahontas	1983	1	21	5	33	20.40	38.06700	-80.14400	0.4	Instrumental	0.0	Md	VTSO	ANSS	
36	19830526010	Monroe	1983	5	26	1	4	44.80	37.50600	-80.31600	2.2	Instrumental	0.0	Md	VTSO	ANSS	
37	19830610000	Greenbrier	1983	6	10	0	18	40.40	37.94800	-80.16300	1.2	Instrumental	0.0	Md	VTSO	ANSS	
38	19830610001	Greenbrier	1983	6	10	0	24	57.00	37.95100	-80.18900	1.2	Instrumental	0.0	Md	VTSO	ANSS	
39	19830610002	Greenbrier	1983	6	10	0	31	8.30	37.93800	-80.16800	0.4	Instrumental	0.0	Md	VTSO	ANSS	
40	19830720040	Greenbrier	1983	7	20	4	41	40.90	37.88500	-80.69100	1.6	Instrumental	0.0	Md	VTSO	ANSS	
41	19830725030	Wyoming	1983	7	25	3	27	0.20	37.49600	-81.35200	0.6	Instrumental	0.0	Md	VTSO	ANSS	
42	19831113160	Summers	1983	11	13	16	51	6.70	37.55600	-80.77500	0.4	Instrumental	0.0	Md	VTSO	ANSS	
43	19831113170	Monroe	1983	11	13	17	50	50.10	37.55900	-80.75300	0.7	Instrumental	0.0	Md	VTSO	ANSS	
44	19831125160	Monroe	1983	11	25	16	27	47.80	37.56800	-80.74500	0.7	Instrumental	0.0	Md	VTSO	<NULL>	
45	19831223100	Summers	1983	12	23	10	51	21.90	37.76600	-80.83700	0.3	Instrumental	0.0	Md	VTSO	ANSS	
46	19840202050	Mingo	1984	2	2	5	10	19.70	37.71700	-82.21800	1.9	Instrumental	0.0	Md	VTSO	ANSS	
47	19840311040	Summers	1984	3	11	4	1	38.90	37.47400	-80.90000	1.1	Instrumental	0.0	Md	VTSO	ANSS	
48	19841009050	Summers	1984	10	9	5	33	31.50	37.71300	-80.89100	2.1	Instrumental	0.0	Md	VTSO	ANSS	
49	19841221130	Pocahontas	1984	12	21	13	12	21.90	38.19800	-80.20800	1.6	Instrumental	0.0	Md	VTSO	ANSS	
50	19850614070	Mercer	1985	6	14	7	57	10.20	37.53400	-81.02000	0.8	Instrumental	0.0	Md	VTSO	ANSS	
51	19860226210	Pendleton	1986	2	26	21	53	20.80	38.50700	-79.29200	2.3	Instrumental	0.0	Md	VTSO	ANSS	
52	19861220080	Greenbrier	1986	12	20	8	13	12.80	38.05800	-80.64300	1.2	Instrumental	0.0	Md	VTSO	ANSS	
53	19890319100	Logan	1989	3	19	10	7	55.80	37.73500	-82.06400	1.9	Instrumental	0.0	Md	VTSO	ANSS	
54	19910422010	Greenbrier	1991	4	22	1	1	20.20	37.94200	-80.20500	3.5	Instrumental	0.0	Md	VTSO	ANSS	Further Info

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Environmental Protection

Event Num	WVQID	County	UTC Year	UTC Month	UTC Day	UTC HH	UTC MM	UTC SS	Latitude (N)	Longitude (W)	Magnitude	Recorded	MMI	Magnitude Type	Source 1	Source 2	USGS Link
55	19910628180	Kanawha	1991	6	28	18	34	55.50	38.23100	-81.33500	3.0	Instrumental	0.0	Mb	VTSO	ANSS	
56	19920329200	Mercer	1992	3	29	20	16	48.20	37.31400	-81.14900	1.4	Instrumental	0.0	Md	VTSO	ANSS	
57	19920506210	Fayette	1992	5	6	21	20	23.90	38.11800	-81.06900	2.3	Instrumental	0.0	Md	VTSO	ANSS	
58	19921124020	Summers	1992	11	24	2	26	50.70	37.45700	-80.88400	1.2	Instrumental	0.0	Md	VTSO	ANSS	
59	19940204070	Nicholas	1994	2	4	7	40	32.40	38.23600	-80.75900	2.1	Instrumental	0.0	Md	VTSO	ANSS	
60	19940619080	Nicholas	1994	6	19	8	36	41.30	38.33900	-80.64000	1.7	Instrumental	0.0	Md	VTSO	ANSS	
61	19951115100	Raleigh	1995	11	15	10	29	24.80	37.71700	-81.04300	2.6	Instrumental	0.0	Md	VTSO	ANSS	
62	19951228230	Fayette	1995	12	28	23	48	30.40	38.08400	-80.96800	2.5	Instrumental	0.0	Md	VTSO	ANSS	
63	19960811090	Greenbrier	1996	8	11	9	11	21.30	37.73100	-80.62800	2.1	Instrumental	<NULL>	Mc	ANSS	<NULL>	
64	19970222140	Fayette	1997	2	22	14	32	33.10	37.92100	-81.02700	2.0	Instrumental	<NULL>	Mc	ANSS	<NULL>	
65	19970315050	Webster	1997	3	15	5	56	36.40	38.34700	-80.48400	1.8	Instrumental	0.0	Md	VTSO	ANSS	
66	19970315050	Kanawha	1998	10	2	10	1	6.90	38.06800	-81.46600	2.5	Instrumental	0.0	Md	VTSO	ANSS	
67	20001016170	Braxton	2000	10	16	17	56	13.80	38.63600	-80.92000	2.5	Instrumental	0.0	Md	VTSO	ANSS	
68	20011204210	Summers	2001	12	4	21	15	13.90	37.72600	-80.75200	3.1	Instrumental	0.0	Mb	VTSO	ANSS	
69	20020327080	Mingo	2002	3	27	8	25	3.30	37.75300	-82.17100	2.1	Instrumental	0.0	Md	VTSO	ANSS	
70	20060711120	Greenbrier	2006	7	11	12	1	43.10	37.87800	-80.64900	2.6	Instrumental	0.0	Mb	CERI	VTSO	
71	20070830120	Wyoming	2007	8	30	12	52	9.34	37.75300	-81.63600	2.6	Instrumental	0.0	Lg GS	CERI	USGS ENS	Further Info
72	20080129010	Monroe	2008	1	29	1	4	20.70	37.54480	-80.50980	2.4	Instrumental	<NULL>	Md	CERI	ANSS	
73	20090411180	Summers	2009	4	11	18	11	9.07	37.51330	-80.89570	2.4	Instrumental	<NULL>	Md	CERI	ANSS	
74	20100404090	Braxton	2010	4	4	9	19	14.01	38.59900	-80.91617	3.4	Instrumental	0.0	MbLg	CERI	USGS ENS	Further Info
75	20100129010	Braxton	2010	4	29	1	36	22.59	38.68567	-80.81483	2.6	Instrumental	0.0	MbLg	CERI	USGS ENS	Further Info
76	20100429120	Braxton	2010	4	29	12	38	53.43	38.64700	-80.87200	2.7	Instrumental	0.0	MbLg	USGS ENS	CERI	Further Info
77	20100429130	Braxton	2010	4	29	23	26	39.47	38.72200	-80.80300	2.5	Instrumental	0.0	Lg GS	CERI	USGS ENS	Further Info
78	20100507100	Braxton	2010	5	7	10	26	3.47	38.60650	-80.91317	2.6	Instrumental	0.0	MbLg	CERI	USGS ENS	Further Info
79	20100508030	Braxton	2010	5	8	3	3	0.62	38.62300	-80.91133	2.4	Instrumental	0.0	Md	CERI	USGS ENS	Further Info
80	20100724090	Braxton	2010	7	24	9	15	44.13	38.67533	-80.82017	2.4	Instrumental	0.0	Md	CERI	USGS ENS	Further Info
81	20100725030	Braxton	2010	7	25	3	48	70.00	38.67900	-80.79700	2.2	Instrumental	0.0	Md	USGS ENS	LDEO	
82	20100815040	Lewis	2010	8	15	4	38	47.38	38.81833	-80.42983	2.5	Instrumental	0.0	Md	CERI	USGS	Further Info
83	20100821030	Upshur	2010	8	21	3	16	21.99	38.79250	-80.39767	2.5	Instrumental	0.0	Md	USGS ENS	LDEO	Further Info
84	20100826040	Raleigh	2010	8	26	4	22	15.19	37.74833	-81.20467	2.4	Instrumental	0.0	Md	CERI	USGS	
85	20100826041	Raleigh	2010	8	26	4	24	55.39	37.72733	-81.20433	2.2	Instrumental	0.0	Md	CERI	USGS ENS	
86	20100913150	Lincoln	2010	9	13	15	8	46.47	38.10000	-82.03400	2.4	Instrumental	0.0	Md	CERI	ANSS	
87	20110825050	Greenbrier	2011	8	25	5	59	13.76	37.91600	-80.21533	2.7	Instrumental	4.0	Md	CERI	USGS	Further Info
88	20120111190	Braxton	2012	1	10	19	38	58.66	38.70400	-80.95900	2.8	Instrumental	4.0	unk	CERI	USGS	Further Info
89	20120316150	Boone	2012	3	16	15	5	55.00	38.21200	-81.71400	2.8	Instrumental	2.0	MbLg	CERI	USGS NEIC	Further Info
90	20130331140	Braxton	2013	3	31	14	1	24.03	38.64500	-80.83317	3.4	Instrumental	5.0	Mw	CERI	USGS NEIC	Further Info
91	20130720110	Gilmer	2013	7	20	11	38	46.18	38.89567	-80.88700	2.7	Instrumental	<NULL>	MbLg	CERI	USGS ENS	Further Info
92	20130730060	Gilmer	2013	7	30	6	9	4.85	38.83933	-80.90867	2.8	Instrumental	<NULL>	Md	CERI	USGS ENS	Further Info
93	20130816110	Gilmer	2013	8	16	11	2	21.04	38.84150	-80.93867	2.6	Instrumental	3.0	MbLg	CERI	USGS ENS	Further Info
94	20131013090	Braxton	2013	10	13	9	20	58.55	38.70117	-80.82417	2.2	Instrumental	<NULL>	Md	CERI	USGS ENS	Further Info
95	20131019080	Greenbrier	2013	10	19	8	41	57.43	37.74767	-80.64333	2.2	Instrumental	<NULL>	Md	CERI	USGS ENS	Further Info
96	20140606220	Jackson	2014	6	6	22	15	40.79	38.64383	-81.58550	2.6	Instrumental	<NULL>	Md	CERI	USGS ENS	Further Info

Data as of **June 25, 2014**. For a more detailed listing, please download the West Virginia Earthquake spreadsheet from WVGES at **http://www.wvgs.wvnet.edu/www/earthquakes/seismic.html**
If you view this map and data as a PDF, you can click any of the blue hyperlinked text to view further information on a web site.
Please note that USGS Links, above, are considered "beta" at the time of this publication and USGS may change destinations, pages, etc. afterward.

Definition of terms on next page.

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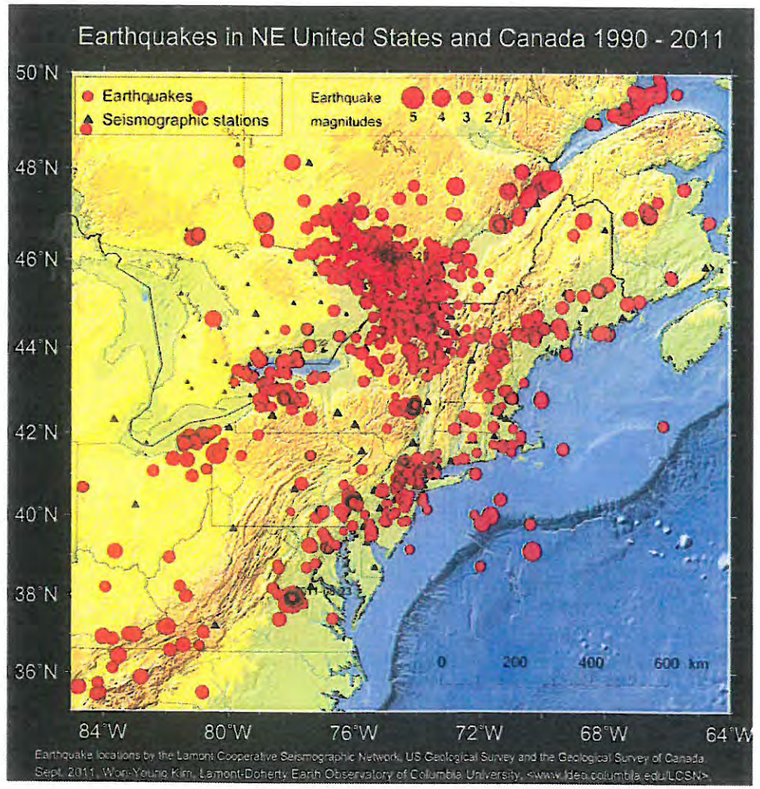
Definitions and Explanations:

- **County**: the name of the county where the epicenter was located, derived from spatial selection.
- Dates and times are in Coordinated Universal Time (UTC) for Year, Month, Day, Hours (HH), Minutes (MM) and Seconds (SS). (For Eastern Standard Time, the offset is - 5 hours).
- **Magnitude (Mag)**: Magnitude numbers indicative of an earthquake's relative size and is the measured maximum motion as recorded by a seismograph. The numbers are pulled from various sources; the primary source whenever possible.
- **Recorded**: refers to the means by which magnitudes were recorded: if they were reported as "felt" (Historical) or recorded via scientific instrumentation (Instrumental) as retrieved from Source1 or Source2.
- **Latitude** (Lat_N) and **Longitude** (Lon_W) values are expressed in decimal degrees for the northern (_N) and western (_W) hemispheres, respectively.
- **MMI**: The Modified Mercalli Intensity scale for epicenter intensity, usually designated with Roman numerals. Visit USGS at http://earthquake.usgs.gov/learn/topics/mercalli.php for further information.
- **Mag_Type**: Magnitude type code; the method used in measuring magnitudes (e.g., *Mb* for "body-wave", *Mc* for "coda amplitude", *Md* for "coda duration").
- **Depth_KM**: The reported depth of the earthquake hypocenter or focus (below the epicenter on the surface) in kilometers.

For other or more detailed earthquake and seismological definitions, please visit the USGS (http://earthquake.usgs.gov/learn/glossary/) and Rapid Earthquake Viewer (http://rev.seis.sc.edu/definition.html).

Sources (Source1 and Source2):

- VTSO – Virginia Tech Seismological Observatory (Primary Source)
- ANSS – Advanced National Seismic System
- CERI – Center for Earthquake Research and Information
- LDEO – Lamont-Doherty Earth Observatory
- NCEER – National Center for Earthquake Engineering Research
- USGS ENS – United States Geological Survey, Earthquake Notification Service
- Wheeler I-2737 – Wheeler, Russell L., *Earthquakes In and Near the Northeastern United States, 1638-1998* (Used only as reference here)



Northeastern United States and southeastern Canadian earthquakes from 1990 to 2011.
Image courtesy of the Lamont-Doherty Earth Observatory (Won-Young Kim)
of Columbia University, New York. Used by permission.

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Fig. No. 8

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Sturm Environmental Services

JOHN W. STURM, PRESIDENT

COMPANY: H.G. ENERGY, LLC.

SAMPLE ID: YAWKEY PLANT – INJECTION WATER FRESH

SAMPLED BY: C. ROSS

DATE/TIME SAMPLED: 05-04-15 0925

DATE/TIME RECEIVED: 05-04-15 1045

LABORATORY ID: HGE 150504-1

PARAMETER	TEST RESULTS	UNITS	METHOD	METHOD DETECTION LIMIT	DATE/TIME ANALYZED	ANALYST
FLOW	POOLED	gpm			05-04-15 0925	CR
FIELD pH	7.90	units			05-04-15 0925	CR
FIELD COND	410	µmhos			05-04-15 0925	CR
FIELD TEMP	15	°C			05-04-15 0925	CR
pH	7.1	units	SM 22nd 4500 H B	.1	05-04-15 1831	SW
Fe	U	mg/L	EPA 200.7 Rev 4.4-1994	.02	05-05-15 0942	RS
Mn	U	mg/L	EPA 200.7 Rev 4.4-1994	.002	05-05-15 0942	RS
TSS	11 J	mg/L	SM22nd 2540 D	4	05-05-15 1005	BB
TDS	208 J	mg/L	SM22nd 2540 C	4	05-05-15 1005	BB
MBAS	.04	mg/L	SM22nd 5540C	.01	05-05-15 1938	SW
TOC	3.8 J	mg/L	SM22nd 5310B	1.0	05-08-15 1243	MW
SO_4	U	mg/L	EPA 300.0 Rev 2.1-1993	1.0	05-06-15 2300	DC
Cl^-	49.3	mg/L	EPA 300.0 Rev 2.1-1993	.50	05-06-15 2300	DC
Al	U	mg/L	EPA 200.7 Rev 4.4-1994	.02	05-05-15 0942	RS
As	.011 J	mg/L	SM22nd 3113 B	.0005	05-07-15 1919	SB
Ba	.020 J	mg/L	EPA 200.7 Rev 4.4-1994	.002	05-07-15 0918	RS
Ca	U	mg/L	EPA 200.7 Rev 4.4-1994	.10	05-13-15 0916	RS
Na	42.5	mg/L	EPA 200.7 Rev 4.4-1994	.03	05-13-15 0916	RS
SPEC GRAVITY	.9967	mg/L	CALCULATION		05-04-15 1841	SW

*Client Provided

**See Attached. The following results meet or exceed requirements and standards set forth by the certifying authority except where noted.

Data Qualifiers

B Analyte found in reagent blank. Indicates possible reagent or background contamination.

E Estimated Reported value exceeded calibration range.

J Reported value is an estimate because concentration is less than reporting limit.

N Organic constituents tentatively identified. Confirmation is needed.

PND Precision not determined.

R Sample results rejected because of gross deficiencies in QC or method performance. Re-sampling and/or re-analysis is necessary.

RND Recovery not determined.

U Compound was analyzed for, but not detected.

Approved Dept. of Rec.

Sturm Environmental Services

JOHN W. STURM, PRESIDENT

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MICROBIOLOGY

COMPANY: H.G. ENERGY, LLC.

SAMPLED BY: C. ROSS

ANALYST: MW

METHOD: 3

DATE & TIME SAMPLED: 05-04-15 0925

DATE & TIME RECEIVED: 05-04-15 1045

DATE & TIME ANALYZED: 05-04-15 1428

LABORATORY ID: HGE 150504-1

YAWKEY PLANT – INJECTION WATER

SAMPLE ID	TOTAL COLIFORM P/A	E. COLI PA	DATE/TIME SAMPLED	LOG NO.
FRESH	ABSENT	ABSENT	05-04-15 0925	HGE 150504-1

Microbiological analysis results will be discarded after 5 years
Method of Analysis from "Standard Methods for the Examination of Water and Wastewater,"

1 – Coliform, Fecal (MF)	9222 D
2 – Coliform, Fecal (MPN)	COLILERT 18
3 – Coliform, Total (MPN)	COLILERT
4 – Coliform, Total (P/A)	9223 B
5 – Hetertrophic Plate Count (HPC)	9215 B

Approved

* Client provided
**See Attached. The following results meet or exceed requirements and standards set forth by the certifying authority except where noted.

Summit Environmental Technologies, Inc.
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

Analytical Report

(consolidated)

WO#: 15050582

Date Reported: 5/23/2015

CLIENT: Sturm Environmental Services **Collection Date:** 5/4/2015 9:25:00 AM

Project: H.G. ENERGY, LLC.

Lab ID: 15050582-001 **Matrix:** LIQUID

Client Sample ID 515050 YAWKEY PLANT - INJECTION WATER FRESH

Analyses	Result	MDL	Qual	Units	Uncertainty	DF	Date Analyzed
GROSS ALPHA/BETA ANALYSIS (900.0)					**E900.0**		Analyst: **BRD**
ALPHA, Gross	4.26	2.52		pCi/L	± 2.55	1	5/20/2015 7:28:00 AM
BETA, Gross	4.04	3.29		pCi/L	± 2.73	1	5/20/2015 7:28:00 AM
RADIUM-226 ANALYSIS (903.0)					**E903.0**		Analyst: **BRD**
Radium-226	ND	0.667		pCi/L	± 0.17	1	5/15/2015 8:46:00 AM
Yield	1.00					1	5/15/2015 8:46:00 AM
RADIUM-228 ANALYSIS (904.0)					**E904.0**		Analyst: **BRD**
Radium-228	1.85	0.900		pCi/L	± 0.76	1	5/14/2015 1:26:00 PM
Yield	1.00					1	5/14/2015 1:26:00 PM

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Qualifiers:

*	Value exceeds Maximum Contaminant Level.	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response
MC	Value is below Minimum Compound Limit.	N	Tentatively identified compounds
ND	Not Detected at the Reporting Limit	O	RSD is greater than RSDlimit
P	Second column confirmation exceeds	PL	Permit Limit

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Summit Environmental Technologies, Inc.
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Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

Analytical Report

(consolidated)

WO#: 15050582

Date Reported: 5/23/2015

CLIENT: Sturm Environmental Services **Collection Date:** 5/4/2015 9:25:00 AM

Project: H.G. ENERGY, LLC.

Lab ID: 15050582-001 **Matrix:** LIQUID

Client Sample ID 515050 YAWKEY PLANT - INJECTION WATER FRESH

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
DISSOLVED GASES-NPW				**RSK-175**		Analyst: **ET**
Butane	ND	0.0100		ppm	1	5/13/2015 10:30:00 AM
Ethane	ND	0.0100		ppm	1	5/13/2015 10:30:00 AM
Methane	0.338	0.0100		ppm	1	5/13/2015 10:30:00 AM
Propane	ND	0.0100		ppm	1	5/13/2015 10:30:00 AM
TPH-DRO-LIQUID				**SW8015B**	**SW3510C**	Analyst: **ET**
TPH - DIESEL RANGE ORGANICS (8015)						
TPH-DRO	ND	0.0790		mg/L	1	5/14/2015 3:00:00 PM
Surr: p-Terphenyl	43.8	29 - 153		%REC	1	5/14/2015 3:00:00 PM
TPH-ORO-8015-LIQUID				**SW8015B**	**SW3510C**	Analyst: **ET**
TPH - OIL RANGE ORGANICS (8015)						
Oil Range Organics C20-C34	ND	0.0920		mg/L	1	5/14/2015 3:00:00 PM
Surr: p-Terphenyl	43.8	29 - 153		%REC	1	5/14/2015 3:00:00 PM
TPH - GRO (SW846: 8015B)				**SW8015B**		Analyst: **JCR**
TPH - GASOLINE RANGE ORGANICS (8015)						
TPH-GRO	ND	0.0230		mg/L	1	5/7/2015 4:00:00 PM
Surr: FID a,a,a-TFT	75.2	52 - 138		%REC	1	5/7/2015 4:00:00 PM
BTEX-LIQUID-8260B				**SW8260B**		Analyst: **MES**
VOC BY GC/MS (8260)						
Benzene	ND	0.000160		mg/L	1	5/7/2015 2:59:00 PM
Ethylbenzene	ND	0.0000800		mg/L	1	5/7/2015 2:59:00 PM
m,p-Xylene	ND	0.000220		mg/L	1	5/7/2015 2:59:00 PM
o-Xylene	ND	0.000190		mg/L	1	5/7/2015 2:59:00 PM
Toluene	ND	0.000140		mg/L	1	5/7/2015 2:59:00 PM
Surr: 4-Bromofluorobenzene	121	70 - 130		%REC	1	5/7/2015 2:59:00 PM
Surr: Dibromofluoromethane	97.7	70 - 130		%REC	1	5/7/2015 2:59:00 PM
Surr: Toluene-d8	104	70 - 130		%REC	1	5/7/2015 2:59:00 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response
MC	Value is below Minimum Compound Limit	N	Tentatively identified compounds
ND	Not Detected at the Reporting Limit	O	RSD is greater than RSDlimit
P	Second column confirmation exceeds	PL	Permit Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
U	Samples with CalcVal < MDL	J	Analyte detected below quantitation limits

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Sturm Environmental Services

JOHN W. STURM, PRESIDENT

COMPANY: H.G. ENERGY, LLC.

SAMPLE ID: YAWKEY PLANT – INJECTION WATER PRODUCED

SAMPLED BY: C. ROSS

DATE/TIME SAMPLED: 05-04-15 0950

DATE/TIME RECEIVED: 05-04-15 1045

LABORATORY ID: HGE 150504-2

PARAMETER	TEST RESULTS	UNITS	METHOD	METHOD DETECTION LIMIT	DATE/TIME ANALYZED	ANALYST
FLOW	POOLED	gpm			05-04-15 0950	CR
FIELD pH	7.00	units			05-04-15 0950	CR
FIELD COND	-OR-	µmhos			05-04-15 0950	CR
FIELD TEMP	25.5	°C			05-04-15 0950	CR
pH	6.4	units	SM 22nd 4500 H B	.1	05-04-15 1831	SW
Fe	3.59	mg/L	EPA 200.7 Rev 4.4-1994	.02	05-05-15 0942	RS
Mn	1.28	mg/L	EPA 200.7 Rev 4.4-1994	.002	05-05-15 0942	RS
TSS	39 J	mg/L	SM22nd 2540 D	4	05-05-15 1005	BB
TDS	122496	mg/L	SM22nd 2540 C	4	05-05-15 1005	BB
MBAS	.35	mg/L	SM22nd 5540C	.01	05-05-15 1938	SW
TOC	14.0	mg/L	SM22nd 5310B	1.0	05-08-15 1243	MW
SO_4	27.9	mg/L	EPA 300.0 Rev 2.1-1993	1.0	05-06-15 2300	DC
Cl^-	77300.	mg/L	EPA 300.0 Rev 2.1-1993	.50	05-06-15 2300	DC
Al	U	mg/L	EPA 200.7 Rev 4.4-1994	.02	05-05-15 0942	RS
As	.0070	mg/L	SM22nd 3113 B	.0005	05-07-15 1919	SB
Ba	2.05	mg/L	EPA 200.7 Rev 4.4-1994	.002	05-07-15 0918	RS
Ca	.26 J	mg/L	EPA 200.7 Rev 4.4-1994	.10	05-13-15 0916	RS
Na	U	mg/L	EPA 200.7 Rev 4.4-1994	.03	05-13-15 0916	RS
SPEC GRAVITY	1.0785	mg/L	CALCULATION		05-04-15 1841	SW

*Client Provided

**See Attached. The following results meet or exceed requirements and standards set forth by the certifying authority except where noted.

Data Qualifiers

B Analyte found in reagent blank. Indicates possible reagent or background contamination.

E Estimated Reported value exceeded calibration range.

J Reported value is an estimate because concentration is less than reporting limit.

N Organic constituents tentatively identified. Confirmation is needed.

PND Precision not determined.

R Sample results rejected because of gross deficiencies in QC or method performance. Re-sampling and/or re-analysis is necessary.

RND Recovery not determined.

U Compound was analyzed for, but not detected.

Approved _____

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Sturm Environmental Services

JOHN W. STURM, PRESIDENT

MICROBIOLOGY

COMPANY: H.G. ENERGY, LLC.

DATE & TIME SAMPLED: 05-04-15 0950

SAMPLED BY: C. ROSS

DATE & TIME RECEIVED: 05-04-15 1045

ANALYST: MW

DATE & TIME ANALYZED: 05-04-15 1428

METHOD: 3

LABORATORY ID: HGE 150504-1

YAWKEY PLANT – INJECTION WATER

SAMPLE ID	TOTAL COLIFORM P/A	E. COLI PA	DATE/TIME SAMPLED	LOG NO.
PRODUCED	PRESENT	ABSENT	05-04-15 0950	HGE 150504-2

Microbiological analysis results will be discarded after 5 years
Method of Analysis from "Standard Methods for the Examination of Water and Wastewater,"

1 – Coliform, Fecal (MF) 9222 D
2 – Coliform, Fecal (MPN) COLILERT 18
3 – Coliform, Total (MPN) COLILERT
4 – Coliform, Total (P/A) 9223 B
5 – Hetertrophic Plate Count (HPC) 9215 B

Approved

* Client provided
**See Attached. The following results meet or exceed requirements and standards set forth by the certifying authority except where noted.

Summit Environmental Technologies, Inc.
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

Analytical Report

(consolidated)

WO#: 15050582

Date Reported: 5/23/2015

CLIENT: Sturm Environmental Services **Collection Date:** 5/4/2015 9:50:00 AM

Project: H.G. ENERGY, LLC.

Lab ID: 15050582-002 **Matrix:** LIQUID

Client Sample ID 515051 YAWKEY PLANT - INJECTION WATER PRODUCED

Analyses	Result	MDL	Qual	Units	Uncertainty	DF	Date Analyzed
GROSS ALPHA/BETA ANALYSIS (900.0)					**E900.0**		Analyst: **BRD**
ALPHA, Gross	3010	2.52	*	pCi/L	± 1030	1	5/21/2015
BETA, Gross	1730	3.29		pCi/L	± 333	1	5/21/2015
RADIUM-226 ANALYSIS (903.0)					**E903.0**		Analyst: **BRD**
Radium-226	35.8	0.667	*	pCi/L	± 1.07	1	5/15/2015 8:46:00 AM
Yield	1.00					1	5/15/2015 8:46:00 AM
RADIUM-228 ANALYSIS (904.0)					**E904.0**		Analyst: **BRD**
Radium-228	52.3	0.900	*	pCi/L	± 3.58	1	5/14/2015 2:05:00 PM
Yield	1.00					1	5/14/2015 2:05:00 PM

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Qualifiers:

*	Value exceeds Maximum Contaminant Level.	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response
MC	Value is below Minimum Compound Limit.	N	Tentatively identified compounds
ND	Not Detected at the Reporting Limit	O	RSD is greater than RSDlimit
P	Second column confirmation exceeds	PL	Permit Limit

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Website: http://www.settek.com

Analytical Report

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WO#: **15050582**

Date Reported: **5/23/2015**

CLIENT: Sturm Environmental Services **Collection Date:** 5/4/2015 9:50:00 AM

Project: H.G. ENERGY, LLC.

Lab ID: 15050582-002 **Matrix:** LIQUID

Client Sample ID 515051 YAWKEY PLANT - INJECTION WATER PRODUCED

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
DISSOLVED GASES-NPW				**RSK-175**		Analyst: **ET**
Butane	0.312	0.0100		ppm	1	5/13/2015 10:30:00 AM
Ethane	1.88	0.0100		ppm	1	5/13/2015 10:30:00 AM
Methane	0.456	0.0100		ppm	1	5/13/2015 10:30:00 AM
Propane	1.15	0.0100		ppm	1	5/13/2015 10:30:00 AM
TPH-DRO-LIQUID **TPH - DIESEL RANGE ORGANICS (8015)**				**SW8015B**	**SW3510C**	Analyst: **ET**
TPH-DRO	1.95	0.0790		mg/L	1	5/14/2015 3:00:00 PM
Surr: p-Terphenyl	60.1	29 - 153		%REC	1	5/14/2015 3:00:00 PM
TPH-ORO-8015-LIQUID **TPH - OIL RANGE ORGANICS (8015)**				**SW8015B**	**SW3510C**	Analyst: **ET**
Oil Range Organics C20-C34	1.07	0.0920		mg/L	1	5/14/2015 3:00:00 PM
Surr: p-Terphenyl	60.1	29 - 153		%REC	1	5/14/2015 3:00:00 PM
TPH - GRO (SW846: 8015B) **TPH - GASOLINE RANGE ORGANICS (8015)**				**SW8015B**		Analyst: **JCR**
TPH-GRO	4.48	0.0230		mg/L	1	5/7/2015 4:32:00 PM
Surr: FID a,a,a-TFT	93.1	52 - 138		%REC	1	5/8/2015 4:20:00 PM
BTEX-LIQUID-8260B **VOC BY GC/MS (8260)**				**SW8260B**		Analyst: **MES**
Benzene	0.766	0.00160		mg/L	10	5/7/2015 4:41:00 PM
Ethylbenzene	ND	0.000800	J	mg/L	10	5/7/2015 4:41:00 PM
m,p-Xylene	0.431	0.00220		mg/L	10	5/7/2015 4:41:00 PM
o-Xylene	0.140	0.00190		mg/L	10	5/7/2015 4:41:00 PM
Toluene	1.06	0.00140		mg/L	10	5/7/2015 4:41:00 PM
Surr: 4-Bromofluorobenzene	113	70 - 130		%REC	10	5/7/2015 4:41:00 PM
Surr: Dibromofluoromethane	97.9	70 - 130		%REC	10	5/7/2015 4:41:00 PM
Surr: Toluene-d8	102	70 - 130		%REC	10	5/7/2015 4:41:00 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response
MC	Value is below Minimum Compound Limit.	N	Tentatively identified compounds
ND	Not Detected at the Reporting Limit	O	RSD is greater than RSDlimit
P	Second column confirmation exceeds	PL	Permit Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
U	Samples with CalcVal < MDL	J	Analyte detected below quantitation limits

Summit Environmental Technologies, Inc.
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

May 23, 2015

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WV Department of
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Kim
Sturm Environmental Services
P.O.Box 650
Bridgeport, WV 26330
TEL: 304-623-6549
FAX: 304-623-6552

RE: H.G. ENERGY, LLC.

Order No.: 15050582

Dear Kim:

Summit Environmental Technologies, Inc. received 2 sample(s) on 5/7/2015 for the analyses presented in the following report.

There were no problems with the analytical events associated with this report unless noted in the Case Narrative.

Quality control data is within laboratory defined or method specified acceptance limits except where noted.

If you have any questions regarding these tests results, please feel free to call the laboratory.

Sincerely,

Dr. Mo Osman
Project Manager
3310 Win St.
Cuyahoga Falls, Ohio 44223

CC:
Lori Hiles
Missy Hoops

A2LA 0724.01, Alabama 41600, Arizona AZ0788, Arkansas 88-0735, California 07256CA, Colorado, Connecticut PH-0105, Delaware, Florida NELAC E87688, Georgia E87688 and 943, Idaho OH00923, Illinois 200061 and Reg.5, Indiana C-OH-13, Kansas E-10347, Kentucky (Underground Storage Tank) 3, Kentucky 90146, Louisiana 04061 and LA12004, Maine 2012015, Maryland 339, Massachusetts M-OPH923, Minnesota 409711, Montana CERT0099, New Hampshire 2996, New Jersey OH006, New York 11777, North Carolina 39705 and 631, Ohio Drinking Water 4170, Ohio VAP CL0052, Oklahoma 9940, Oregon OH200001, Pennsylvania 68-01335, Rhode Island LA000317, South Carolina 92016001, Tennessee TN04018, Texas T104704466-11-5, Region 8 8TMS-L, USDA/APHIS P330-11-00244, Utah OH009232011-1, Vermont VT-87688, Virginia 00440 and 1581, Washington C891, West Virginia 248 and 9957C and E87688, Wisconsin 399013010

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Summit Environmental Technologies, Inc.
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

Case Narrative

WO#: 15050582
Date: 5/23/2015

CLIENT: Sturm Environmental Services
Project: H.G. ENERGY, LLC.

This report in its entirety consists of the documents listed below. All documents contain the Summit Environmental Technologies, Inc., Work Order Number assigned to this report.

Paginated Report including Cover Letter, Case Narrative, Analytical Results, Applicable Quality Control Summary Reports, and copies of the Chain of Custody Documents are supplied with this sample set.

Concentrations reported with a J-Flag in the Qualifier Field are values below the Limit of Quantitation (LOQ) but greater than the established Method Detection Limit (MDL).

Method numbers, unless specified as SM (Standard Methods) or ASTM, are EPA methods.

Estimated uncertainty values are available upon request.

Analysis performed by DBM, VRM, or SFG were performed at Summit Labs 2704 Eatonton Highway Haddock, GA 31033

All results for Solid Samples are reported on an "as received" or "wet weight" basis unless indicated as "dry weight" using the "-dry" designation on the reporting units.

Summit Environmental Technologies, Inc., holds the accreditations/certifications listed at the bottom of the cover letter that may or may not pertain to this report.

The information contained in this analytical report is the sole property of Summit Environmental Technologies, Inc. and that of the customer. It cannot be reproduced in any form without the consent of Summit Environmental Technologies, Inc. or the customer for which this report was issued. The results contained in this report are only representative of the samples received. Conditions can vary at different times and at different sampling conditions. Summit Environmental Technologies, Inc. is not responsible for use or interpretation of the data included herein.

This report is believed to meet all of the requirements of NELAC or the accrediting / certifying agency. Any comments or problems with the analytical events associated with this report are noted below.

Summit Environmental Technologies, In
3310 Win S
Cuyahoga Falls, Ohio 4422
TEL: (330) 253-8211 FAX: (330) 253-446
Website: http://www.settek.co

Qualifiers and Acronyms

WO#: 15050582
Date: 5/23/2015

H.G. ENERGY, LLC.

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These commonly used Qualifiers and Acronyms may or may not be present in this report.

Qualifiers

U	The compound was analyzed for but was not detected.
J	The reported value is greater than the Method Detection Limit but less than the Reporting Limit.
H	The hold time for sample preparation and/or analysis was exceeded.
D	The result is reported from a dilution.
E	The result exceeded the linear range of the calibration or is estimated due to interference.
MC	The result is below the Minimum Compound Limit.
*	The result exceeds the Regulatory Limit or Maximum Contamination Limit.
m	Manual integration was used to determine the area response.
N	The result is presumptive based on a Mass Spectral library search assuming a 1:1 response.
P	The second column confirmation exceeded 25% difference.
C	The result has been confirmed by GC/MS.
X	The result was not confirmed when GC/MS Analysis was performed.
B/MB+	The analyte was detected in the associated blank.
G	The ICB or CCB contained reportable amounts of analyte.
QC-/+	The CCV recovery failed low (-) or high (+).
R/QDR	The RPD was outside of accepted recovery limits.
QL-/+	The LCS or LCSD recovery failed low (-) or high (+).
QLR	The LCS/LCSD RPD was outside of accepted recovery limits.
QM-/+	The MS or MSD recovery failed low (-) or high (+).
QMR	The MS/MSD RPD was outside of accepted recovery limits.
QV-/+	The ICV recovery failed low (-) or high (+).
S	The spike result was outside of accepted recovery limits.

Acronyms

ND	Not Detected	**RL**	Reporting Limit
QC	Quality Control	**MDL**	Method Detection Limit
MB	Method Blank	**LOD**	Level of Detection
LCS	Laboratory Control Sample	**LOQ**	Level of Quantitation
LCSD	Laboratory Control Sample Duplicate	**PQL**	Practical Quantitation Limit
QCS	Quality Control Sample	**CRQL**	Contract Required Quantitation Limit
DUP	Duplicate	**PL**	Permit Limit
MS	Matrix Spike	**RegLvl**	Regulatory Limit
MSD	Matrix Spike Duplicate	**MCL**	Maximum Contamination Limit
RPD	Relative Percent Different	**MinCL**	Minimum Compound Limit
ICV	Initial Calibration Verification	**RA**	Reanalysis
ICB	Initial Calibration Blank	**RE**	Reextraction
CCV	Continuing Calibration Verification	**TIC**	Tentatively Identified Compound
CCB	Continuing Calibration Blank	**RT**	Retention Time
RLC	Reporting Limit Check	**CF**	Calibration Factor
DF	Dilution Factor	**RF**	Response Factor

This list of Qualifiers and Acronyms reflects the most commonly utilized Qualifiers and Acronyms for reporting. Please refer to the Analytical Notes in the Case Narrative for any Qualifiers or Acronyms that do not appear in this list or for additional information regarding the use of these Qualifiers on reported data.

Summit Environmental Technologies, Inc.
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

Workorder Sample Summary

WO#: 15050582

23-May-15

CLIENT: Sturm Environmental Services
Project: H.G. ENERGY, LLC.

Lab SampleID	Client Sample ID	Tag No	Date Collected	Date Received	Matrix
15050582-001	515050		5/4/2015 9:25:00 AM	5/7/2015 1:30:00 AM	Liquid
15050582-002	515051		5/4/2015 9:50:00 AM	5/7/2015 1:30:00 AM	Liquid

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Sturm Environmental Services

STURM ENVIRONMENTAL
BRUSHY FORK ROAD
BRIDGEPORT, WV 26330
PHONE: 304-623-6549
FAX: 304-623-6552

STURM ENVIRONMENTAL SERVICES
610 D STREET
SO. CHARLESTON, WV 25303
PHONE: 304-744-9864
FAX: 304-744-7866

MAILING ADDRESSES ARE LISTED BELOW

REPORT TO: Client Name: HG Energy
Address:
City/State/Zip:
Contact Person: Roger Heldman
Telephone Number: Fax No.
Email Address:
Sampler Name: (Print) Chris Ross
Sampler Signature:
Project Name: @ Yankey Plant - Injection Water
Special Reporting: Email Results Fax Results

BILL TO: Client Name:
Address:
City/State/Zip:
Contact Person:
Telephone Number: Fax No.
Email Address:
Purchase Order #:
TURN AROUND TIME: Standard
RUSH (pre-scheduled; surcharges may apply) *Please Check One*
Date Needed

1 DAY	2 DAY	3 DAY

Sample ID / Description	COMPOSITE SAMPLE: START DATE	START TIME	END DATE	END TIME	GRAB SAMPLE: DATE	TIME	PRESERVATIVE: Ice	OTHER	HCl	NaOH	H_2SO_4 Plastic	H_2SO_4 Glass	None	HNO_3	MATRIX: Groundwater	Wastewater	Drinking Water	Sludge	Soil	Other (specify):	ANALYZE FOR:	# of Bottles	Field pH	Flow (gpm, cfs, mgd) circle one	Field Conductivity	Field DO	Field Chlorine (mg/L or ug/L) circle one	Field Temp (F° or C°) circle one
Collect Fresh	7	15			5/15	7	X					X	X									15			416			-
Dry # 19						9r	X					X	X											Pulled				- -

Comments

Records retained for 5 years

Laboratory Comments:
Temperature Upon Receipt
Bottles Preserved? Y N

Relinquished by:	Date	Time	Received by:	Date	Time	Temp upon Receipt:
	5/4/15	1345		5/4/15	1845	0.7
Relinquished by:	Date	Time	Received by:	Date	Time	
	5/4/15	1400				

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Summit Environmental Technologies, Inc.
3310 Win Street
Cuyahoga Falls, Ohio 44223 Tel: 330.253.8211 Fax: 330.253.4489

Analysis Request/Chain of Custody

For Summit Environmental Technologies, Inc. use only

Page ____ of ____ SET No.

Company Name (Please Print)	Project Name
Sturm Environmental	
Company Address: PO Box 650, Bridgeport, WV 26330	Project Address
Client Phone No.: 304 623-6549	Report to
Client Fax No.: 304 623-6552 Please Fax Results ✓ ☐	PO# 6937
Client Email: Mhayos@sturmenvironmental.com Please Email Results ✓ ☑	Quote No. 032012-05
Contact Person: Kim	
Sampled by: C. Ross	Check if Ohio VAP samples ✓ ☐

#	Sample Identification	Date Collected	Time Collected	Grab	Composite	Matrix: S=Solid, L=Liquid, O=Oil SL=Sludge, A=Air, DW=Drinking Water	Preservative	Number of Containers	Analytical Parameters and Methods: Please Check Analytical Box ✓ — Alkalinity (Bicarb, Carb, Hydrox) 2320	Gases: Acetic/Iso/n-Butyric/Propionic/Valeric	TPH-DRO, DRO, GRO	BTEX	Dissolved: Methane	" Ethane	" Butane	" Propane		
	S15050	5-4-15	0925	X		L	HNO3 HCL	10	X		X	X	X	X	X	X	
	S15051	"	0950	X		L	"	10	X		X	X	X	X	X	X	

15050582-001
002
GSL

Relinquished by:	Date	Time	Received by:	Date	Time
K. Ihnat	5-6-15	2146		5-6-15	2146
Received in lab by:	Date	Time	Rush Requested By: ____ Date	Must be approved by lab manager	
Kim Ross	5/7/15	1150			

Notes/Comments: Report on seperate sheets

White and yellow pages should accompany samples to the laboratory. The client retains the pink page.

108308

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Date: 07/27/13

Summit Environmental Technologies, Inc.
Cooler Receipt Form

Client: Stura

Initials of person inspecting cooler and samples: BAR

Order Number: 15050582

Date Received: 5/7/15 Time Received: 15 Date cooler(s) opened and samples inspected: 5/7/15

Number of Coolers/Boxes: 1 N/A

Shipper: FED EX UPS DHL Airborne US Postal Walk-in (Pickup) Other: _____

Packaging: Peanuts Bubble Wrap Paper Foam (None) Other: _____

Tape on cooler/box:	Y	(N)	N/A
Custody Seals intact	Y	N	(N/A)
C-O-C in plastic	Y	(N)	N/A
Ice ✓ Blue ice _____	(present) / absent / melted		N/A
Sample Temperature IR Gun #16020459 CF 0.0 °C	4.2 °C		N/A
Radiological Testing Instrument serial #35127 (see page 2 for scan results)	Y	N	(N/A)

**Use 1 sheet per sample for Radiological Testing. If sample is HOT, the Radiological Safety Officer must be notified immediately.

C-O-C filled out properly	(Y)	N	N/A
Samples in separate bags	(Y)	N	N/A
Sample containers intact*	(Y)	N	N/A

*If no, list broken sample(s): _____

Sample label(s) complete (ID, date, etc.)	(Y)	N	N/A
Label(s) agree with C-O-C	(Y)	N	N/A
Correct containers used	(Y)	N	N/A
Sufficient sample received	(Y)	N	N/A
Bubbles absent from 40 mL vials**	Y	(N)	N/A

** Samples with bubbles <6mm are acceptable. Indicate bubble size if >6mm. _____

Was client contacted about samples	Y	N
Will client send new samples	Y	N

Client contact: _____

Date/Time: _____

Logged in by: _____

Comments: _____

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Summit Environmental Technologies, Inc.
Sample Receipt

pH test on samples

Client ID	Test	pH
1	✓	2
		7
2	✓	2
		7

Radiological scan on sample

Client ID	scan	CPM
1	✓	26
2	✓	31

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Sturm Environmental Services

STURM ENVIRONMENTAL
BRUSHY FORK ROAD
BRIDGEPORT, WV 26330
PHONE: 304-623-6549
FAX: 304-623-6552

STURM ENVIRONMENTAL SERVICES
610 D STREET
SO. CHARLESTON, WV 25303
PHONE: 304-744-9864
FAX: 304-744-7866

MAILING ADDRESSES ARE LISTED BELOW

REPORT TO: Client Name: HG Energy
Address:
City/State/Zip:
Contact Person: Roger Heldman
Telephone Number: Fax No.
Email Address:
Sampler Name: (Print) Chris Ross
Sampler Signature:
Project Name: @ Yawkey Plant-Injection Water
Special Reporting: Email Results Fax Results

BILL TO: Client Name:
Address:
City/State/Zip:
Contact Person:
Telephone Number: Fax No.
Email Address:
Purchase Order #:
TURN AROUND TIME: Standard
RUSH (pre-scheduled; surcharges may apply) *Please Check One*
Date Needed

1 DAY | 2 DAY | 3 DAY

Sample ID / Description	COMPOSITE SAMPLE START DATE	START TIME	END DATE	END TIME	GRAB SAMPLE DATE	TIME	PRESERVATIVE Ice	OTHER	HCl	NaOH	H_2SO_4 Plastic	H_2SO_4 Glass	None	HNO_3	MATRIX Groundwater	Wastewater	Drinking Water	Sludge	Soil	Other (specify):	ANALYZE FOR:	# of Bottles	Field pH	Flow (gpm, cfs, mgd) circle one	Field Conductivity	Field DO	Field Chlorine (mg/L or ug/L) circle one	Field Temp (°F or °C) circle one
Caliber+# 17 Fresh	7	15			5/4/15	925	X						XX									15	7.90	Pooled	410			15
Produced					↓	950	X						XX									15	7.00	Pooled	-Or-			25.5
Caliber# 190 15																												

Comments

Records retained for 5 years

Laboratory Comments:
Temperature Upon Receipt (1.8) <6
Bottles Preserved? Y N

Relinquished by:	Date	Time	Received by:	Date	Time	Temp upon Receipt:
	5/4/15	1045		5/4/15	1045	0.7
Relinquished by:	Date	Time	Received by:	Date	Time	
	5/4/15	1400				

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Fig. No. 9

Product Data

BAKER HUGHES

Baker Petrolite

(X-CIDE® 107W Industrial Bactericide, continued)

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SAFETY AND HANDLING:

X-CIDE 107W is a registered biocide (EPA Registration Number 10707-29). Refer to the container label for precautionary, environmental, first aid, handling, storage and disposal information. This biocide should only be applied as specified. Goggles and impermeable gloves should be worn when handling this product. Contaminated skin or eyes should be flushed with water.

Empty drums should not be reused. They should be returned to drum reconditioners; or destroyed, by perforating or crushing, and buried in a safe place away from water supplies.

This biocide is toxic to fish and wildlife. Avoid contamination of water sources by cleaning of equipment or disposal of wastes. Treated effluent should not be discharged into lakes, streams, ponds or public waters unless in accordance with and NPDES permit. For guidance, contact your Regional Office of the EPA.

Before handling, storage or use, see the Material Safety Data Sheet (MSDS) for details.

Baker Petrolite 24 Hour Emergency Hotline:
1-800-424-9300 (CHEMTREC) U.S.A.
1-613-996-6666 (CANUTEC) Canada
Baker Petrolite Customer Care Hotline:
1-800-872-1916 (8 a.m. to 5 p.m. CST)

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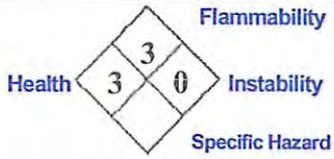
BAKER HUGHES
Baker Petrolite

Material Safety Data Sheet

Section 1. Chemical Product and Company Identification

Product Name	**X-CIDE® 107W INDUSTRIAL BACTERICIDE**	**Code**	XC107W
Supplier	Baker Petrolite A Baker Hughes Company 12645 W. Airport Blvd. (77478) P.O. Box 5050 Sugar Land, TX 77487-5050 For Product Information/MSDSs Call: 800-231-3606 (8:00 a.m. - 5:00 p.m. cst, Monday - Friday) 281-276-5400	**Version**	4.0
Material Uses	Industrial Bactericide	**Effective Date**	**10/11/2007**
24 Hour Emergency Numbers	CHEMTREC 800-424-9300 (U.S. 24 hour) Baker Petrolite 800-231-3606 (001)281-276-5400 CANUTEC 613-996-6666 (Canada 24 hours) CHEMTREC Int'l 01-703-527-3887 (International 24 hour)	**Print Date**	10/11/2007
			® a trademark of Baker Hughes, Inc.

National Fire Protection Association (U.S.A.)



Section 2. Hazards Identification

Physical State and Appearance	State: Liquid., Color: Amber., Odor: Strong Alcohol-like.
CERCLA Reportable Quantity	Methanol, 13181 gal. of this product.
Hazard Summary	DANGER. May cause chronic effects. Flammable liquid. Vapors can form an ignitable or explosive mixture with air. Can form explosive mixtures at temperatures at or above the flash point. Vapors can flow along surfaces to a distant ignition source and flash back. Static discharges can cause ignition or explosion when container is not bonded. May be irritating to eyes, skin and respiratory tract. May be toxic by skin absorption. May cause skin sensitization (allergic reaction). May be toxic if inhaled.
Routes of Exposure	Skin (Permeator), Skin (Contact), Eyes, Inhalation.
Potential acute health effects	
Eyes	May be severely irritating to the eyes. Prolonged contact may cause burns.
Skin	May be severely irritating to the skin. May cause burns on prolonged contact. Skin sensitizer. May cause allergic skin reactions with repeated exposure. May be toxic if absorbed through the skin.
Inhalation	May be toxic if inhaled.
Ingestion	Not considered a likely route of exposure, however, may be corrosive if swallowed.
Medical Conditions aggravated by Exposure	Exposure to this product may aggravate medical conditions involving the following: kidneys, nervous system, liver, gastrointestinal tract, respiratory tract, skin/epithelium, eyes.
See Toxicological Information (section 11)	
Additional Hazard Identification Remarks	Not available.

Continued on Next Page

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Section 3. Composition/Information on Ingredients

Name	CAS #	% by Weight
Isopropanol	67-63-0	30 - 60
Glutaraldehyde	111-30-8	10 - 30
Oxydiethylene bis(alkyl* dimethyl ammonium chloride)	68607-28-3	5 - 10
Methanol	67-56-1	1 - 5

See Section 8 for information on permissible exposure limits and threshold limit values.*Alkyl is derived from coconut oil fatty acids.

Section 4. First Aid Measures

Eye Contact	Immediately flush the eye(s) continuously with lukewarm, gently flowing water for at least 20-60 minutes while holding the eyelid(s) open. Get medical attention immediately.
Skin Contact	Remove contaminated clothing and shoes immediately. Wash affected area with soap and mild detergent and large amounts of lukewarm, gently flowing water until no evidence of chemical remains (for at least 20-60 minutes). Get medical attention if irritation occurs.
Inhalation	Remove to fresh air. Oxygen may be administered if breathing is difficult. If not breathing, administer artificial respiration and seek medical attention. Get medical attention if symptoms appear.
Ingestion	Get medical attention immediately. If swallowed, do not induce vomiting unless directed to do so by medical personnel. Wash out mouth with water if person is conscious. Never induce vomiting or give anything by mouth to a victim who is unconscious or having convulsions.
Notes to Physician	Not available.
Additional First Aid Remarks	Not available.

Section 5. Fire Fighting Measures

Flammability of the Product	Flammable liquid. Vapors can form an ignitable or explosive mixture with air. Can form explosive mixtures at temperatures at or above the flash point. Vapors can flow along surfaces to a distant ignition source and flash back. Static discharges can cause ignition or explosion when container is not bonded.
OSHA Flammability Class	IC
Products of Combustion	These products are carbon oxides (CO, CO2) Hydrogen chloride fumes. nitrogen oxides (NO, NO2...).
Fire Hazards in Presence of Various Substances	Open Flames/Sparks/Static. Heat.
Fire Fighting Media and Instructions	In case of fire, use foam, dry chemicals, or CO2 fire extinguishers. Evacuate area and fight fire from a safe distance. Water spray may be used to keep fire-exposed containers cool. Keep water run off out of sewers and public waterways. Note that flammable vapors may form an ignitable mixture with air. Vapors may travel considerable distances and flash back if ignited.
Protective Clothing (Fire)	Do not enter fire area without proper personal protective equipment, including NIOSH approved self-contained breathing apparatus.
Special Remarks on Fire Hazards	Not available.

Continued on Next Page

Section 6. Accidental Release Measures

Spill	Put on appropriate personal protective equipment. Keep personnel removed and upwind of spill. Shut off all ignition sources; no flares, smoking, or flames in hazard area. Approach release from upwind. Shut off leak if it can be done safely. Contain spilled material. Keep out of waterways. Dike large spills and use a non-sparking or explosion-proof means to transfer material to an appropriate container for disposal. For small spills add absorbent (soil may be used in the absence of other suitable materials) scoop up material and place in a sealed, liquid-proof container. Note that flammable vapors may form an ignitable mixture with air. Vapors may travel considerable distances from spill and flash back, if ignited. Waste must be disposed of in accordance with federal, state and local environmental control regulations.
Other Statements	If RQ (Reportable Quantity) is exceeded, report to National Spill Response Office at 1-800-424-8802.
Additional Accidental Release Measures Remarks	Not available.

Section 7. Handling and Storage

Handling and Storage	Put on appropriate personal protective equipment. Avoid contact with eyes, skin, and clothing. Avoid breathing vapors or spray mists. Use only with adequate ventilation. Store in a dry, cool and well ventilated area. Keep away from heat, sparks and flame. Keep away from incompatibles. Keep container tightly closed and dry. To avoid fire or explosion, ground container equipment and personnel before handling product.
Additional Handling and Storage Remarks	Not available.

Section 8. Exposure Controls/Personal Protection

Exposure Limits	Isopropanol	**ACGIH (United States).** TWA: 490 mg/m³ 8 hour/hours. STEL: 980 mg/m³ 15 minute(s). TWA: 200 ppm 8 hour/hours. STEL: 400 ppm 15 minute(s). **OSHA PEL 1989 (United States).** TWA: 400 ppm 8 hour/hours. STEL: 500 ppm 15 minute(s). TWA: 980 mg/m³ 8 hour/hours. STEL: 1225 mg/m³ 15 minute(s).
	Glutaraldehyde	**ACGIH (United States).** CEIL: 0.05 ppm **OSHA PEL 1989 (United States).** CEIL: 0.2 ppm
	Oxydiethylene bis(alkyl dimethyl ammonium chloride)	Not available.
	Methanol	**ACGIH (United States). Skin** TWA: 262 mg/m³ 8 hour/hours. STEL: 328 mg/m³ 15 minute(s). TWA: 200 ppm 8 hour/hours. STEL: 250 ppm 15 minute(s). **OSHA PEL 1989 (United States). Skin**

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	TWA: 200 ppm 8 hour/hours. STEL: 250 ppm 15 minute(s). TWA: 260 mg/m^3 8 hour/hours. STEL: 325 mg/m^3 15 minute(s).
Additional Information on Exposure Limits	The OSHA permissible exposure levels shown above are the OSHA 1989 levels or from subsequent OSHA regulatory actions. Although the 1989 levels have been vacated the 11th Circuit Court of Appeals, Baker Petrolite Corporation recommends that these lower exposure levels be observed as reasonable worker protection.
Engineering Controls	Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors or particles below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Personal Protection

Personal Protective Equipment recommendations are based on anticipated known manufacturing and use conditions. These conditions are expected to result in only incidental exposure. A thorough review of the job tasks and conditions by a safety professional is recommended, however, to determine the level of personal protective equipment appropriate for these job tasks and conditions.

Eyes Chemical safety goggles.

Body Wear long sleeves to prevent repeated or prolonged skin contact.

Respiratory Respirator use is not expected to be necessary under normal conditions of use. In poorly ventilated areas, emergency situations or if exposure levels are exceeded, use NIOSH approved full face respirator.

Hands Chemical resistant gloves. Nitrile or Neoprene gloves.

Feet Chemical resistant boots or overshoes.

Other information Not available.

Additional Exposure Control Remarks	Not available.

Section 9. Physical and Chemical Properties

Physical State and Appearance	Liquid.	**Odor**	Strong Alcohol-like.
pH	2.5 - 3.5 (5% of product in 75%IPA / 25% water mixture)	**Color**	Amber.
Specific gravity	0.939 - 0.951 @ 16°C (60°F)		
Density	7.82 - 7.92 lbs/gal @ 16°C (60°F)		
Flash Points	Closed cup: 27°C (80.6°F). (SFCC)		
Flammable Limits	L.E.L. Not available. U.E.L. Not available.		
Autoignition Temperature	Not available.		
Initial Boiling Point	Not available.		
Boiling Point	Not available.		
Vapor Density	>1 (Air = 1)		
Vapor Pressure	83.1 - mm Hg		
Evaporation Rate	Not Available or Not Applicable for Solids.		
VOC	Not available.		
Viscosity	48 - 53 cP @ 16°C (60°F)		
Pour Point	<-40°C(<-40°F)		

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Solubility (Water)	Soluble
Physical Chemical Comments	Not available.

Section 10. Stability and Reactivity

Stability and Reactivity	The product is stable.
Conditions of Instability	Not available.
Incompatibility with Various Substances	Oxidizing material.
Hazardous Decomposition Products	Not applicable.
Hazardous Polymerization	Hazardous polymerization is not expected to occur.
Special Stability & Reactivity Remarks	Not available.

Section 11. Toxicological information

Component Toxicological Information

Acute Animal Toxicity

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Isopropanol	ORAL (LD50): Acute: 5045 mg/kg [Rat]. 3600 mg/kg [Mouse]. 4710 mg/kg [Male rat]. DERMAL (LD50): Acute: 12800 mg/kg [Rabbit]. VAPOR (LC50): Acute: 16970 ppm 4 hour/hours [Rat]. 12000 ppm 8 hour/hours [Rat].
Glutaraldehyde	ORAL (LD50): Acute: 100 mg/kg [Mouse]. 134 mg/kg [Rat]. VAPOR (LC50): Acute: 480 mg/m^3 4 hour/hours [Rat].
Oxydiethylene bis(alkyl dimethyl ammonium chloride)	Not available.
Methanol	ORAL (LD50): Acute: 5628 mg/kg [Rat]. 7300 mg/kg [Mouse]. DERMAL (LD50): Acute: 15800 mg/kg [Rabbit]. VAPOR (LC50): Acute: 64000 ppm 4 hour/hours [Rat]. 50000 ppm 4 hour/hours [Mouse].

Chronic Toxicity Data

1) Isopropanol

Isopropanol is a component of this product. Ingestion has produced hyperglycemia (high blood sugar) in humans (Lacouture, P, et al, 1983, "American Journal of Medicine" and Chan K-M, et al, 1993, "Clinical Chemistry"). Also, ingestion can produce Central Nervous System effects and gastointestinal symptoms. [IPCS (1990) Environmental Health Criteria 103: 2-propanol. International Program on Chemical Safety, WHO Geneva.]

In a four month study, inhalation of isopropanol vapors for 20 hours per week by laboratory animals produced bronchitis, pneumonia, and blood effects (International Program of Chemical Safety, 1990, Environmental Health Criteria 103: 2-propanol, World Health Organization). Ataxia (a jerky or shaky movement that occurs during voluntary muscle movement) and microscopic hyaline droplets (fungal or branched structures) in the kidneys were seen in rats exposed to isopropanol at concentrations up to 5000 ppm for 6 hours per day, 5 days per week, for 13 weeks (Burleighflayer et al, 1994). Inhalation of high levels of isopropanol (4,000 and 8,000 ppm for 8 hours) has produced congestion in the liver, lungs, and spleen of

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laboratory animals (Laham S, et al, 1980, "Drug and Chemical Toxicology).

Oral and inhalation animal studies isopropanol has been shown to cause fetotoxic and reproductive effects at levels which did not show any maternal toxicity. These effects include reductions in fetal litter weight, reductions in live births and significant skeletal malformations in rats. [Nelson, BK et al (1988), Food and Chemical Toxicology, 26(3), pps 247-254], [Tyl, R.W. et al (1994), Fundamental and Applied Toxicoology, 22, pps 139-151], [Bevan, C., et al (1995), Journal of Applied Toxicology, 15(2), pps 117-123. Chronic inhalation has produced testicular effects in laboratory animals. (Kapp, Jr., R.W., et al, 1996, Regulatory Toxicology and Pharmacology 23:183-192, and Burleigh-Flayer, H., et al, 1997, Fundametnal and Applied Toxicology: 36:95-111)

2) Glutaraldehyde

Glutaraldehyde is a component of this product. In long-term experimental animal studies, glutaraldehyde caused liver damage in mice (ACGIH, 1992), but it was not neurotoxic in rats (Spencer et al, 1978).

Female rats had increased large granular lymphocytic leukemias after receiving glutaraldehyde in the drinking water at levels up to 1,000 ppm for 2 years (Andersen, 1996).

The results of genetic studies have been mixed with no conclusive evidence of positive effects.

In 2-year inhalation studies, there was no evidence of carcinogenic activity in male or female rats exposed to 250, 500 or 750 ppb, or in male or female mice exposed to 62.5, 125, or 250 ppb glutaraldehyde. (OSHA ceiling limit is 0.2 ppm, ACGIH ceiling limit is 0.095 ppm). Incidences of nasal and respiratory lesions were increasedin both male/female rats and mice. Reduction in body weight, as compared to the controls was also noted.

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3) Oxydiethylene bis(alkyl dimethyl ammonium chloride)

Not available.

4) Methanol

Methanol is a component of this product. Because methanol is eliminated from the body more slowly than ethanol, it can have cumulative toxicity with repeated exposures (ACGIH, 1992).

Acute dermal, oral, and inhalation exposure to methanol can cause Central Nervous System effects, optic nerve effects, diminished vision, and brain effects (necrosis and hemorrhaging). (Bennett, I.L. et al, 1953)

Ingestion of methanol can cause Central Nervous System depression, metabolic acidosis, blurred vision and blindness, gastrointestinal effects, and coma and death. (Clayton, G.D. and Clayton, F.E., 1982, Patty's Industrial Hygiene and Toxicology, Vol2C) Dermal exposure to methanol can cause Central Nervous System depression, blurred vision, and gastrointestinal effects. (Downie, A et al, 1992, Occupational Medicine, 42, pp 47-9) Chronic inhalation of methanol can cause Central Nervous System depression, blurred vision, and gastrointestinal effects. (Frederick, L.J. et al, 1984, AIHA Journal, 45, pp 51-5) Chronic inhalation of methanol has caused liver effects in laboratory animals. (Poon, R et al, 1994, Toxocology and Industrial Health 10: 231-245) Chronic oral exposure has caused Central Nervous System effects and eye effects in laboratory animals. [Youssef, A. F. et al (1993) Neurotoxicology and Teratology 15: 223-227; Baumbach, G.L. et al (1977) Archives of Ophthalmology 95: 1859-1865; Hayreh, M.S. et al (1977) Archives of Ophthalmology 95: 1851-1858; Hayreh, M.S. et al (1980) Ocular toxicity of methanol: An experimental study – Raven Press, New York, pages 35-53; and Martin-Amat, G. et al (1977) Archives of Ophthalmology 95: 1847-1850]

Methanol has produced in vivo mutagenicity in animal studies. (Pereira, M.A. et al, 1982) and (Ward, J. B. et al, 1983)

Methanol was mutagenic in yeast (RTECS). Methanol has caused chromosome aberrations in yeast (RTECS) and grasshoppers (Saha & Khudabaksh, 1974).

Methanol has caused birth defects in rats exposed by the oral (Infuma et al, 1981) and inhalation (Nelson et al, 1984; Nelson et al, 1985) routes. Exencephaly (a defect in the skull bone structure that leaves the brain exposed) and cleft palate (a fissure or unformed bone structure in the roof of the mouth (palate), lip, or facial area, occurring during the embryonic stage

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of development) were increased in fetal mice exposed to methanol at an airborne concentration of 5,000 ppm or higher for 7 hours/day on days 6 to 15 of gestation.

Embryotoxicity and fetotoxicity were seen with maternal exposure to airborne concentrations of 7,500 ppm and above, and reduced fetal weights with concentrations of 10,000 ppm or greater. The NOAEL was 1,000 ppm. Effects similar to those seen in the 10,000 ppm dosage group were also seen in offspring of mice given a dose of 4 g/kg orally (Rogers et al, 1993).

Product Toxicological Information	
Acute Animal Toxicity	Not available.
Target Organs	kidneys, nervous system, liver, gastrointestinal tract, respiratory tract, skin/epithelium, eyes.
Other Adverse Effects	Not available.

Section 12. Ecological Information

Ecotoxicity	Not available.
BOD5 and COD	Not available.
Biodegradable/OECD	Not available.
Toxicity of the Products of Biodegradation	Not available.
Special Remarks	Not available.

Section 13. Disposal Considerations

Responsibility for proper waste disposal rests with the generator of the waste. Dispose of any waste material in accordance with all applicable federal, state and local regulations. Note that these regulations may also apply to empty containers, liners and rinsate. Processing, use, dilution or contamination of this product may cause its physical and chemical properties to change.

Additional Waste Remarks	Not available.

Section 14. Transport Information

DOT Classification	FLAMMABLE LIQUID, N.O.S. (Contains: Methanol, Isopropanol), 3, UN1993, III	
DOT Reportable Quantity	Methanol, 13181 gal. of this product.	
Marine Pollutant	Not applicable.	
Additional DOT Information	Not available.	
Emergency Response Guide Number	128	

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Section 15. Regulatory Information

HCS Classification	Target organ effects. Flammable liquid. Irritant. Sensitizer. Toxic.
U.S. Federal Regulations	
Environmental Regulations	Extremely Hazardous Substances: Not applicable to any components in this product. SARA 313 Toxic Chemical Notification and Release Reporting: Methanol; SARA 302/304 Emergency Planning and Notification substances: Not applicable to any components in this product. Hazardous Substances (CERCLA 302): Methanol, 13181 gal. of this product.; SARA 311/312 MSDS distribution - chemical inventory - hazard identification: fire; immediate health hazard; delayed health hazard; Clean Water Act (CWA) 307 Priority Pollutants: Not applicable to any components in this product. Clean Water Act (CWA) 311 Hazardous Substances: Not applicable to any components in this product. Clean Air Act (CAA) 112(r) Accidental Release Prevention Substances: Not applicable to any components in this product.
Threshold Planning Quantity (TPQ)	Not applicable.
TSCA Inventory Status	All components are included or are exempted from listing on the US Toxic Substances Control Act Inventory. This product does not contain any components that are subject to the reporting requirements of TSCA Section 12(b) if exported from the United States.
State Regulations	State specific information is available upon request from Baker Petrolite.
International Regulations	
Canada	All components are compliant with or are exempted from listing on the Canadian Domestic Substance List.
WHMIS (Canada)	Not available.
European Union	All components are included or are exempted from listing on the European Inventory of Existing Commercial Chemical Substances or the European List of Notified Chemical Substances.
	International inventory status information is available upon request from Baker Petrolite for the following countries: Australia, China, Korea (TCCL), Philippines (RA6969), or Japan.
Other Regulatory Information	No further regulatory information is available.

Section 16. Other Information

Other Special Considerations	934 04/17/03 - Changes to Section 2. 06/22/06 - Changes to Sections 1, 2, 3, 5, 8, 9, 11 and 15. 10/11/07 - Changes to Sections 3, 8, and 11.

In April, 2005, a number of format changes were made. The most notable of these were switching Sections 2 and 3, moving the exposure limits to Section 8, and moving the flash point from Section 5 to Section 9.

Baker Petrolite Disclaimer

Continued on Next Page

NOTE: The information on this MSDS is based on data which is considered to be accurate. Baker Petrolite, however, makes no guarantees or warranty, either expressed or implied of the accuracy or completeness of this information.

The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of this product.

This MSDS was prepared and is to be used for this product. If the product is used as a component in another product, this MSDS information may not be applicable.

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Product Data

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X-CIDE® 107W
Industrial Bactericide

DESCRIPTION:

X-CIDE® 107W Industrial Bactericide is a winterized blend of an acidic aldehyde with quaternary amine and nonionic surfactants. It is designed for bacterial control in waters associated with petrochemical and oil field operations.

APPLICATION:

X-CIDE 107W is recommended for use in industrial, non-potable waters where a bactericidal problem is clearly demonstrated. It is particularly effective for bacterial control in tank bottom water where petroleum hydrocarbons are stored.

X-CIDE 107W can be applied via slug treatments or by continuous application. For slug treatments, add 500 ppm of the product to the water system at the appropriate intervals to establish control and to prevent re-growth of bacterial slime. Slug treatments are particularly suited for control of bacteria in storage tank bottom sediments. For continuous treatment applications, inject 20 to 200 ppm of X-Cide 107W at a point where good mixing can be assured. Technical advice can be obtained from your Baker Petrolite representative.

TYPICAL PROPERTIES:

Form	Liquid
Color	amber
Solubility	Water soluble
Ionic character	Cationic
Specific Gravity @ 60°F (16°C)	0.974
Specific Weight @ 60°F (16° C)	7.87 lbs/US gal
Flash Point, SFCC	80°F (27°C)
Pour Point	<-40°F
Viscosity @ 60°F (16°C)	50cps
pH	2.5-3.5

FEATURES AND BENEFITS:

Feature:
- Not effected by total dissolved solids and high brine composition

Benefit:
- Can be used in a wide range of brines

Feature:
- Will not react with H_2S

Benefit:
- Can be used in sour water

Feature:
- Effective against sulfate reducing bacteria at low concentrations

Benefit:
- Reduces microbially influenced corrosion and biogenic H_2S production

Feature:
- Highly surface active

Benefit:
- Cleans lines and penetrates biofilms

Feature:
- Excellent cold weather handling properties

Benefit:
- Flexible application in cold climates

MATERIAL COMPATIBILITY:

Suitable:

Metals:	admiralty brass, aluminum, copper, mild steel, 304 stainless steel, 316 stainless steel
Plastics:	HD polyethylene, HD polypropylene, PVC, fiberglass
Elastomers:	TEFLON

Not Suitable:

Metals:	
Plastics:	PLEXIGLAS, polyurethane
Elastomers:	BUNA N, neoprene, E.P., HYPALON, VITON

(continued)

Disclaimer of Liability: Baker Petrolite Corporation (BPC) warrants to purchaser, but no third parties or others, the specifications for the product shall fall within a generally recognized range for typical physical properties established by BPC when the product departs BPC's point of origin and that any services shall only be performed in accordance with applicable written work documents. BPC MAKES NO OTHER WARRANTY OR GUARANTEE OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING NO IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, REGARDING ANY SERVICES PERFORMED OR PRODUCT SUPPLIED. BPC will give purchaser the benefit of BPC's best judgement in making interpretations of data, but does not guarantee the accuracy or correctness of such interpretations. BPC's recommendations contained herein are advisory only and without representations as to the results. BPC shall not be liable for any indirect, special, punitive, exemplary or consequential damages or losses from any cause whatsoever including but not limited to its negligence.

BPPD2240 (09/98)

Fig. No. 10

Material Safety Data Sheet

1. Product and company identification

Product name : CRW132 CORROSION INHIBITOR

Supplier : Baker Petrolite
A Baker Hughes Company
12645 W. Airport Blvd.
Sugar Land, TX 77478
For Product Information/MSDSs Call: 800-231-3606
(8:00 a.m. - 5:00 p.m. cst, Monday - Friday) 281-276-5400

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Material Uses : Special: Corrosion Inhibitor.

Code : CRW132

Validation date : 8/16/2012.

Print date : 8/16/2012.

Version : 6

Responsible name : Global Regulatory Affairs - Telephone 281-276-5400 or 800-231-3606

In case of emergency : CHEMTREC: 800-424-9300 (U.S. 24 hour)
Baker Petrolite: 800-231-3606
(001)281-276-5400
CANUTEC: 613-996-6666 (Canada 24 hours)
CHEMTREC Int'l 01-703-527-3887 (International 24 hour)

2. Hazards identification

Physical state : Liquid.

Odor : Pungent. Amine-like.

Color : Amber. [Dark]

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Emergency overview : WARNING!

FLAMMABLE LIQUID AND VAPOR. INHALATION CAUSES HEADACHES, DIZZINESS, DROWSINESS AND NAUSEA AND MAY LEAD TO UNCONSCIOUSNESS. CAUSES RESPIRATORY TRACT, EYE AND SKIN IRRITATION. MAY BE HARMFUL IF SWALLOWED. MAY CAUSE BLINDNESS IF SWALLOWED. PROLONGED OR REPEATED CONTACT MAY DRY SKIN AND CAUSE IRRITATION. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA.

Keep away from heat, sparks and flame. Do not breathe vapor or mist. Do not ingest. Do not get in eyes. Avoid contact with skin and clothing. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling. Vapors may form explosive mixtures with air. Vapors can travel to a source of ignition and flashback. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material.

Routes of entry : Dermal contact. Eye contact. Inhalation.

Potential acute health effects

Inhalation : Can cause central nervous system (CNS) depression. Irritating to respiratory system.

Ingestion : Harmful if swallowed. Can cause central nervous system (CNS) depression. May cause blindness if swallowed.

Skin : Irritating to skin.

Eyes : Severely irritating to eyes. Risk of serious damage to eyes.

Potential chronic health effects

2. Hazards identification

Chronic effects : Contains material that may cause target organ damage, based on animal data. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

Target organs : Contains material which may cause damage to the following organs: the nervous system, gastrointestinal tract, upper respiratory tract, skin, central nervous system (CNS), eye, lens or cornea.

Over-exposure signs/symptoms

Inhalation : respiratory tract irritation, nausea or vomiting, coughing, headache, drowsiness/fatigue, dizziness/vertigo, unconsciousness

Ingestion : None known.

Skin : irritation, redness, dryness, cracking

Eyes : pain or irritation, watering, redness

Medical conditions aggravated by over-exposure : Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.

See toxicological information (Section 11)

3. Composition/information on ingredients

Name	CAS number	%
Methanol	67-56-1	10 - 30
Quaternary ammonium compounds	Trade secret.	5 - 10
Alkylpyridine salts	Trade secret.	5 - 10
Ammonium bisulfite	10192-30-0	1 - 5

4. First aid measures

Eye contact : Get medical attention immediately. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids.

Skin contact : In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.

Inhalation : Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

Ingestion : Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

5. Fire-fighting measures

Flammability of the product : Flammable liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.

Extinguishing media

Suitable : Use dry chemical, CO_2, water spray (fog) or foam.

Not suitable : Do not use water jet.

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5 . Fire-fighting measures

Special exposure hazards : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Hazardous thermal decomposition products : carbon dioxide,carbon monoxide,nitrogen oxides,sulfur oxides,halogenated compounds

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6 . Accidental release measures

Personal precautions : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Methods for cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Absorb with an inert material. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor.

Large spill : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Dike spill area and do not allow product to reach sewage system or surface or ground water. Notify any reportable spill to authorities. (See section 12 for environmental risks and 13 for disposal information.) Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

If RQ (Reportable Quantity) is exceeded, report to National Spill Response Office at 1-800-424-8802.

7 . Handling and storage

Handling : Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not breathe vapor or mist. Do not ingest. Avoid contact with eyes, skin and clothing. Use only with adequate ventilation. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

Storage : Store in accordance with local regulations. Store in a segregated and approved area. Store in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

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8 . Exposure controls/personal protection

Occupational exposure limits		TWA (8 hours)			STEL (15 mins)			Ceiling			
Ingredients:	List name	ppm	mg/m³	Other	ppm	mg/m³	Other	ppm	mg/m³	Other	Notations
Methanol	US ACGIH	200	262	-	250	328	-	-	-	-	[1]
	OSHA PEL	200	260	-	-	-	-	-	-	-	
	OSHA PEL 1989	200	260	-	250	325	-	-	-	-	[1]

[1]Absorbed through skin.

Consult local authorities for acceptable exposure limits.

Only components of this product with established exposure limits appear in the box above.

If OSHA permissible exposure levels are shown above they are the OSHA 1989 levels or are from subsequent OSHA regulatory actions. Although the 1989 levels have been vacated the 11th Circuit Court of Appeals, Baker Hughes recommends that these lower exposure levels be observed as reasonable worker protection.

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

Engineering measures : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. Use explosion-proof ventilation equipment.

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Take off contaminated clothing and wash before reuse.

Personal protection

Respiratory : If a risk assessment indicates it is necessary, use a properly fitted supplied air respirator complying with an approved standard. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Hands : Chemical-resistant gloves: Nitrile or Neoprene gloves. 4H gloves.

Eyes : Wear chemical safety goggles. When transferring material wear face-shield in addition to chemical safety goggles.

Skin : Wear long sleeves and other protective clothing to prevent repeated or prolonged skin contact.

9 . Physical and chemical properties

Physical state : Liquid.

Flash point : Closed cup: 31.1°C (88°F) [PMCC]

Auto-ignition temperature : Not available.

Flammable limits : Not available.

Color : Amber. [Dark]

Odor : Pungent. Amine-like.

pH : 4 to 5

: Neat - without dilution.

Boiling/condensation point : Not available.

Initial Boiling Point : Not available.

Melting/freezing point : Not available.

Relative density : 0.97 (15.6°C)

Density : 8.08 (lbs/gal)

Vapor density : >1 [Air = 1]

Odor threshold : Not available.

Evaporation rate : Not available.

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9 . Physical and chemical properties

VOC	: Not available.
Viscosity	: Dynamic (15.6°C): 8 cP
Solubility (Water)	: Soluble
Vapor pressure	: 11.7 kPa (87.9 mm Hg) at 37.8°C (Reid)
Pour Point	: -40°C (-40°F)
Partition coefficient (LogKow)	: Not available.

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10 . Stability and Reactivity

Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Hazardous polymerization	: Under normal conditions of storage and use, hazardous polymerization will not occur.
Conditions to avoid	: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.
Materials to avoid	: Reactive or incompatible with the following materials: oxidizing materials and reducing materials. Methanol is incompatible and may react with acetyl bromide, alkyl aluminum solutions, beryllium hydride, boron trichloride, nitric acid, cyanuric chloride, dichloromethane, diethylzinc, metals (granulated forms of aluminum and magnesium – including aluminum and zinc salts), phosphorus III oxide, and potassium tert-butoxide.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Conditions of reactivity	: Highly flammable in the presence of the following materials or conditions: open flames, sparks and static discharge and heat.

11 . Toxicological information

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Methanol	LD50 Dermal	Rabbit	15800 mg/kg	-
	LD50 Oral	Rabbit	14200 mg/kg	-
	LD50 Oral	Rat	5600 mg/kg	-
	LC50 Inhalation Gas.	Rat	145000 ppm	1 hours
	LC50 Inhalation Gas.	Rat	64000 ppm	4 hours
	LC50 Inhalation Vapor	Mouse	50000 ppm	4 hours

Chronic toxicity Remarks

1) Methanol

Methanol is a component of this product. Because methanol is eliminated from the body more slowly than ethanol, it can have cumulative toxicity with repeated exposures (ACGIH, 1992).

Acute dermal, oral, and inhalation exposure to methanol can cause Central Nervous System effects, optic nerve effects, diminished vision, and brain effects (necrosis and hemorrhaging). (Bennett, I.L. et al, 1953)

Ingestion of methanol can cause Central Nervous System depression, metabolic acidosis, blurred vision and blindness, gastrointestinal effects, and coma and death. (Clayton, G.D. and Clayton, F.E., 1982, Patty's Industrial Hygiene and Toxicology, Vol2C) Dermal exposure to methanol can cause Central Nervous System depression, blurred vision, and gastrointestinal effects. (Downie, A et al, 1992, Occupational Medicine, 42, pp 47-9) Chronic inhalation of methanol can cause Central Nervous System depression, blurred vision, and gastrointestinal effects. (Frederick, L.J. et al, 1984, AIHA Journal, 45, pp 51-5) Chronic inhalation of methanol has caused liver effects in laboratory animals. (Poon, R et al, 1994,

11 . Toxicological information

Toxocology and Industrial Health 10: 231-245) Chronic oral exposure has caused Central Nervous System effects and eye effects in laboratory animals. [Youssef, A. F. et al (1993) Neurotoxicology and Teratology 15: 223-227; Baumbach, G.L. et al (1977) Archives of Ophthalmology 95: 1859-1865; Hayreh, M.S. et al (1977) Archives of Ophthalmology 95: 1851-1858; Hayreh, M.S. et al (1980) Ocular toxicity of methanol: An experimental study – Raven Press, New York, pages 35-53; and Martin-Amat, G. et al (1977) Archives of Ophthalmology 95: 1847-1850]

Methanol has produced in vivo mutagenicity in animal studies. (Pereira, M.A. et al, 1982) and (Ward, J. B. et al, 1983)

Methanol was mutagenic in yeast (RTECS). Methanol has caused chromosome aberrations in yeast (RTECS) and grasshoppers (Saha & Khudabaksh, 1974).

Methanol has caused birth defects in rats exposed by the oral (Infurna et al, 1981) and inhalation (Nelson et al, 1984; Nelson et al, 1985) routes. Exencephaly (a defect in the skull bone structure that leaves the brain exposed) and cleft palate (a fissure or unformed bone structure in the roof of the mouth (palate), lip, or facial area, occurring during the embryonic stage of development) were increased in fetal mice exposed to methanol at an airborne concentration of 5,000 ppm or higher for 7 hours/day on days 6 to 15 of gestation.

Embryotoxicity and fetotoxicity were seen with maternal exposure to airborne concentrations of 7,500 ppm and above, and reduced fetal weights with concentrations of 10,000 ppm or greater. The NOAEL was 1,000 ppm. Effects similar to those seen in the 10,000 ppm dosage group were also seen in offspring of mice given a dose of 4 g/kg orally (Rogers et al, 1993).

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2) Quaternary ammonium compounds

Not available.

3) Alkylpyridine salts

Not available.

Ammonium bisulfite

Ammonium bisulfite is a component of this product. Prolonged contact can produce corrosion of the skin and permanent damage to the eye. Under acidic conditions, sulfur dioxide may be formed. Inhalation of sulfur dioxide can cause stricture of the esophagus, acute pulmonary edema, and respiratory failure. Sulfur dioxide has been linked to miscarriages, gynecological disease, and abnormal pregnancies (Reprotext).

The ACGIH exposure limits for sulfur dioxide are TWA of 2 ppm and STEL of 5 ppm. The OSHA exposure limit for sulfur dioxide is a TWA of 5 ppm.

12 . Ecological information

Aquatic ecotoxicity

Product/ingredient name	Result	Species	Exposure
Methanol	Acute LC50 2500000 ug/L Marine water	Crustaceans - Common shrimp, sand shrimp - Crangon crangon - Adult	48 hours
	Acute LC50 3289 to 4395 mg/L Fresh water	Daphnia - Water flea - Daphnia magna - Neonate - <24 hours	48 hours
	Acute LC50 >100000 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling) - 0.2 to 0.5 g	96 hours
CRW132 CORROSION INHIBITOR	Acute LC50 2.61 mg/L	Daphnia - Daphnia magna	48 hours
	Acute LC50 3 ppm	Daphnia - Daphnia pulex	48 hours
	Acute LC50 2.3 mg/L	Fish - Fathead minnow	96 hours
	Acute LC50 2.3 mg/L	Fish - Sheepshead minnow	96 hours

12 . Ecological information

Conclusion/Summary : Not available.

Biodegradability

Conclusion/Summary : Not available.

Additional information

An EcoTox™ Report, and/or the material's environmental fate is available upon request at the following number: 1-800-235-4249, then press 4.

13. Disposal considerations

Waste disposal : The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

14 . Transport information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
DOT Classification	UN1993	FLAMMABLE LIQUID, N.O.S. (Contains: Methanol)	3	III		-
TDG Classification	UN1993	FLAMMABLE LIQUID, N.O.S. (Contains: Methanol)	3	III		-
IMDG Class	UN1993	FLAMMABLE LIQUID, N.O.S. (Contains: Methanol)	3	III		Emergency schedules (EmS) F-E S-D
IATA-DGR Class	UN1993	FLAMMABLE LIQUID, N.O.S. (Contains: Methanol)	3	III		-

PG* : Packing group

DOT Reportable Quantity Methanol, 2070 gal of this product.
Ammonium bisulfite, 24752 gal of this product.

Marine pollutant Not applicable.

North-America NAERG : 128

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15 . Regulatory information

HCS Classification : Flammable liquid
Irritating material
Target organ effects

U.S. Federal regulations : **United States inventory (TSCA 8b)**: All components are listed or exempted.

SARA 302/304/311/312 extremely hazardous substances: No products were found.
SARA 302/304 emergency planning and notification: No products were found.
SARA 302/304/311/312 hazardous chemicals: ammonium hydrogensulphite; Methanol
SARA 311/312 MSDS distribution - chemical inventory - hazard identification: CRW132 CORROSION INHIBITOR: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard

CERCLA: Hazardous substances.: ammonium hydrogensulphite: 5000 lbs. (2270 kg); Methanol: 5000 lbs. (2270 kg);

Clean Water Act (CWA) 307: No products were found.

Clean Water Act (CWA) 311: ammonium hydrogensulphite

Clean Air Act (CAA) 112 regulated flammable substances: No products were found.

Clean Air Act (CAA) 112 regulated toxic substances: No products were found.

Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs) :
Listed

SARA 313

Supplier notification :

Product name	CAS number	Concentration
Methanol	67-56-1	10 - 30
Ammonium bisulfite	10192-30-0	1 - 5

United States inventory (TSCA 8b) : All components are listed or exempted.

Canada

WHMIS (Canada) : Class B-2: Flammable liquid
Class D-1B: Material causing immediate and serious toxic effects (Toxic).
Class D-2A: Material causing other toxic effects (Very toxic).
Class D-2B: Material causing other toxic effects (Toxic).

Canada (CEPA DSL): : All components are listed or exempted.

16 . Other information

Label requirements : FLAMMABLE LIQUID AND VAPOR. INHALATION CAUSES HEADACHES, DIZZINESS, DROWSINESS AND NAUSEA AND MAY LEAD TO UNCONSCIOUSNESS. CAUSES RESPIRATORY TRACT, EYE AND SKIN IRRITATION. MAY BE HARMFUL IF SWALLOWED. MAY CAUSE BLINDNESS IF SWALLOWED. PROLONGED OR REPEATED CONTACT MAY DRY SKIN AND CAUSE IRRITATION. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA.

National Fire Protection Association (U.S.A.) :



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Date of printing : 8/16/2012.

☑ Indicates information that has changed from previously issued version.

Notice to reader

16 . Other information

NOTE: The information on this MSDS is based on data which is considered to be accurate. Baker Hughes, however, makes no guarantees or warranty, either expressed or implied of the accuracy or completeness of this information.

The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of this product.

This MSDS was prepared and is to be used for this product. If the product is used as a component in another product, this MSDS information may not be applicable.

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(1)

AOR - Well Review Checklist

API Number: 47- 043 - 02202 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 1
Farm Name: J V Alford
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2254
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 418,378 Northing: 4,236,409
Elevation: 227
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☐

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

43-0220

Hours from } Date Rec'd By

Alford Farm, No. of Lease

Lincoln District Lincoln County

Well No. One Date of Location

Dg Commenced 19

Completed 19

Drilling Commenced June 28th, 19 09

Drilling Completed August 10th, 19 09 C. V. Tiffin & Company, Co.

CASING RECORD

	CHANGED TO WELL		PUT IN WELL		BOTTOM OF CASING		PULLED OUT OF WELL		LEFT IN WELL		TRANSFERRED BE-FORE COMPLETION		LEFT IN WELL BUT NOT IN USE	
Size	Feet	In.	Feet	In.	Feet	In.	Feet	In.	Feet	In.	Feet	In.	Feet	In.
8	230		230		230				230					
6 5/8	1635		1635		1635				1635					
6 1/2	1704		1704		1704				1704					

FORMATION	TOP	BOTTOM	THICKNESS
Coal	160	164	
Sand	220	225	
Salt Sand	985	1525	
Little Lime	1590	1608	
Big Lime	1610	1752	
Big Injun	1760	1794	
Berea Sand	2235	2254	

SHOT RECORD

Month	Day	Yr.	Size Shot	Length of Shell	Top of Shot	Remarks
8	10	09	120			
4	20	10	80			

REMARKS:

Water well drilled 118'

Water in Salt Sand at 1025'

El = 756.42

ABANDONED

Size	Casing Pulled	Casing Left In

REMARKS:

WR-38
Rev. 5/08

API# 47- 043 - 2202

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL & GAS

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE IN TRIPLICATE, one copy mailed to the Department, 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: Jonas V. Alford
Location: Elevation: 758'
District: Duval
Latitude: ____ Feet South of: ____ Deg. ____ Min. ____ Sec.
Longitude: ____ Feet West of: ____ Deg. ____ Min. ____ Sec.

Operator Well No.: No.1
Quadrangle: Garrett's Bend 7.5'
County: Lincoln

Well Type: Oil X Gas ____ WIW ____

Company: East Resources Inc.
P.O. Box 5519
Vienna, WV 26105
Agent: Philip S. Ondrusek

Coal Operator or Owner: NA
Coal Operator or Owner: ____

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WV Department of Environmental Protection

Permit Issued: 11/3/10

AFFIDAVIT

State of West Virginia, County of Wood ss:

Mark Miller and Paul Stevens 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 operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 20th day of October, 20 10 and the well was plugged and filled in the following manner:

TYPE	FROM	TO	PIPE REMOVED		LEFT
Cement	2220'	2103'	6 5/8"	0'	1635'
Cement	1769'	1600'	5 3/16"	1704'	0'
Cement	1013'	900'			
Cement	451'	350'			
Cement	319'	200'			
Cement	100'	0'			
		Perforated 6 5/8" casing; 3 shots from 953' - 948'; 403'-398'			
		220'-217 & 100' - 97'			
6% Gel Between Cement Plugs					

Description of monument: 5 1/2" x 5' and that the work of plugging and filling said well was completed on the 2nd day of Novembe, 20 10

And further deponents saith not. Mark Miller
Roger McComas

Sworn and subscribed before me this 1 day of December, 20 10

My commission expires: Nov. 12, 2018

Notary Public: Tina Pfithiel

Affidavit reviewed by the Office of Oil and Gas: Paul D. Trippett

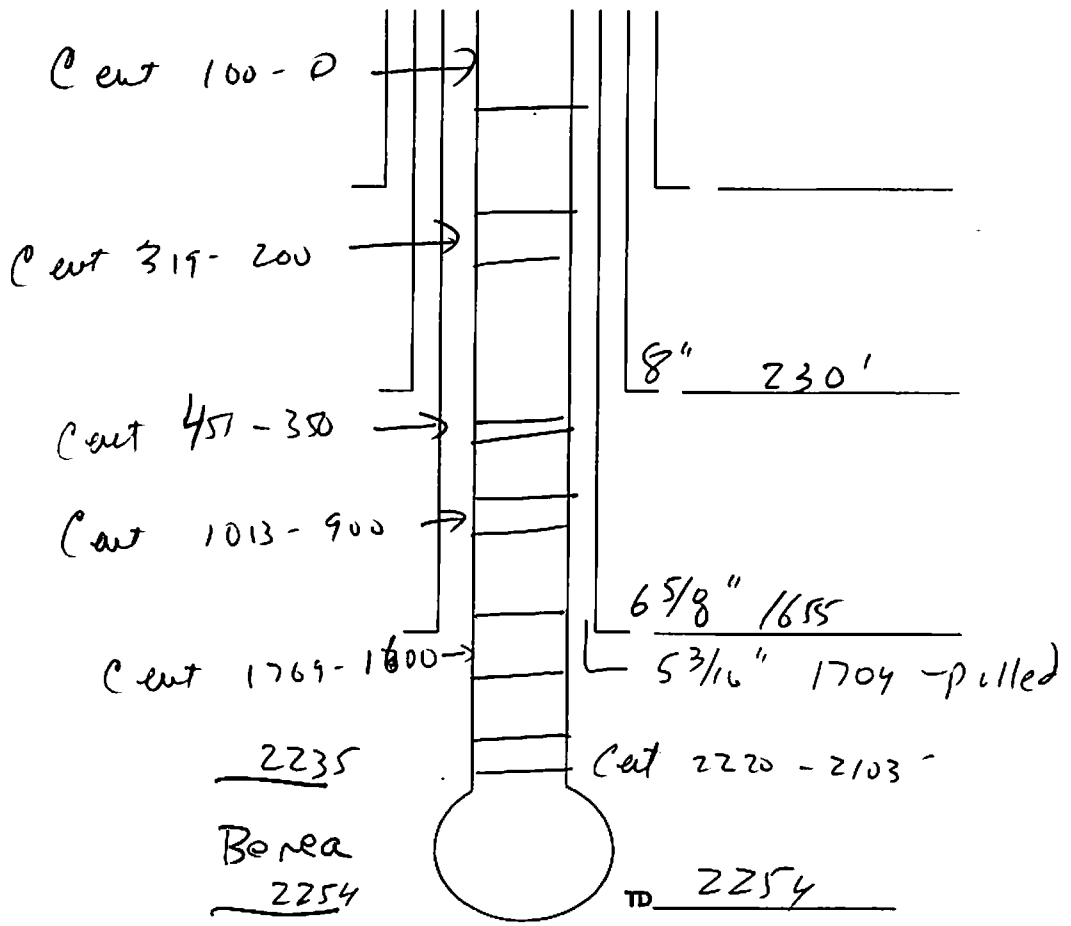
Title: District Inspector

OFFICIAL SEAL
NOTARY PUBLIC
STATE OF WEST VIRGINIA
TINA PFITHIEL
East Resources, Inc
P.O. Box 5519
Vienna, West Virginia 26105
My Commission Expires Nov. 12, 2018

T V Alford 1

Griffithsville Unit #2 Field

47-043- 08202



From Drillers Records/Plugging Records

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(2)

AOR - Well Review Checklist

API Number: 47-00231 Area Permit Number: 2R AP
Operator Name: H6 Exp.
Operator's Well #: 2
Farm Name: TV Alford
Field Name: Griffith II - # 2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☐ Producer (NonWaterflood) ☒ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☒ Plugged ☐
TD of well: 2303
Completion Zones: Berea Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 418,328 Northing: 4,236,240
Elevation: 235
Inside Field Boundary? ☐ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☐

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = 0
Bottom Hole Injection Pressure 0
Hydrostatic Pressure 0

Comments:

Casing leak. - TA.

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-00231

Well No. 2 Jonas V. Alford Farm 123 Acres
Lease No. 75059 Duval Township District Lincoln County W. Va. State
Meabon Drilling Co Contractor Meabon Drilling Co. Contractor
Drilling Commenced 1-24-1938 Drilling Completed 3-9-1938
N. S. E. W. Elevation

Rock Formation	Top	Bottom	Steel Line Measurement	Remarks
Red Rock		15		
Sand	15	25		
Casing - 10"		17		
Red Rock	25	60		
Sand	60	70		
Water, 3 Bailers Per Hr.		65		
Red Rock	70	130		
Sand	130	155		
Slate	155	272		
Casing 8 1/4"		211-11"		
Red Rock	272	380		
Sand	380	415		
Slate	415	425		
Brown Sand	425	705		
Water, Fresh, 1 Bailer Per Hour		570	570.	
Slate & Shells	705	810		
Slate	810	865		
Sand	865	960		
Slate	960	965		
Salt Sand	965	1160		
Water, Hole Full		1180		
(Continued)				

CASING RECORD AS TALLIED. NOT STEEL LINE MEASUREMENT.

	Put in Well		Pulled Out		Left in Well		Shot Date
Size	Feet	In	Feet	In.	Feet	In.	Amount
							Sand
							Result
							Packer Size
							Depth Set

Production First 24 Hours.....Bbls. Gas Test.....

Approved by..... Superintendent

47-043-00231

Well No. 2 Jonas V. Alford (Continued) / Farm — Acres
Lease No. — Township District — County — State
Contractor — Contractor
Drilling Commenced 19 — Drilling Completed 19
N. S. E. W. — Elevation

Rock Formation	Top	Bottom	Steel Line Measurement	Remarks
Broken Sand	1160	1170		
Sand, White	1170	1398		
Slate	1398	1400		
Sand, Hard	1400	1518		
Slate	1518	1520		
Maxon Sand	1520	1575		
Little Lime	1575	1600		
Black Slate	1600	1607		
Big Lime	1607	1780		
Casing 6 5/8"		1756		
Gas		1735		
Big Injun	1780	1823		
Red Rock	1823	1825		
Berea Sand	1825	1840		
Slate & Shells	1840	1985		
Casing 5 3/16"		1946		
Blue Lime, Hard	1985	2020		
Slate	2020	2248		
Coffee Shale	2248	2282		
Berea Sand	2282	2302		
Slate	2302	2303		
Total Depth		2303	2303	

CASING RECORD AS TALLIED. NOT STEEL LINE MEASUREMENT.

Size	Put in Well Feet	In	Pulled Out Feet	In.	Left in Well Feet	In.
10"	17					
8 1/4"	211	11				
6 5/8"	1756					
5 3/16"	1946					
2" U.E.	2294	4				

Shot Date 3-15-38
Amount 90 qts.
Sand 2284-2302
Result Open Flow
150 Ft. of Fluid in Hole
When Shot
Packer Size OWS Hook Wall
5 3/16" x 6 5/8" x 10"
Depth Set 1946

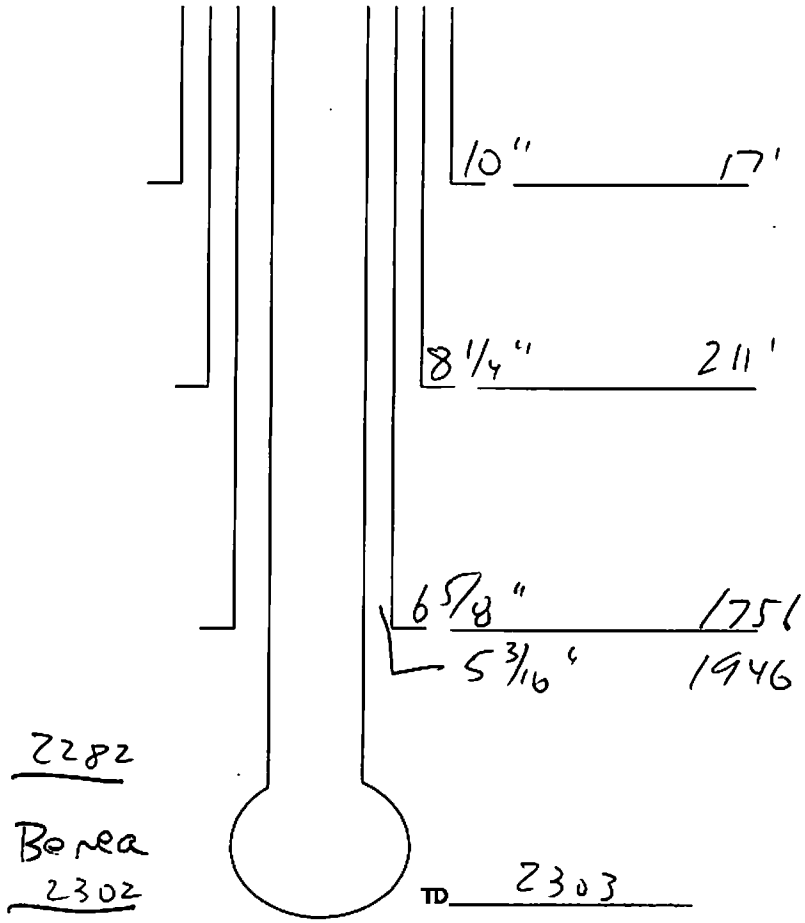
Production First 24 Hours Oil Bbls. Gas Test

Approved by S. H. Crummett Superintendent

JV Afford 2

Griffithsville Unit #2 Field

47-043- 00231



From Drillers Records/Plugging Records

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(3)

AOR - Well Review Checklist

API Number: 47- 043 - 00396 Area Permit Number: 2R AP
Operator Name: H & Enos
Operator's Well #: 3
Farm Name: J V Alford
Field Name: Griffithsville + 2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☐ Producer (NonWaterflood) ☑ Observation ☐ Other ☐
Well Status: Active ☒ Abandoned ☐ Plugged ☐
TD of well: 2432
Completion Zones: Berea Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 418,000 Northing: 4,236,162
Elevation: 278
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☐	Yes ☐	
Date of Last MIT:	Passed?	No ☐	Yes ☐	
Open Hole Completion		No ☐	Yes ☐	
Well penetrates injection zone?		No ☐	Yes ☐	
Well perforated in injection zone?		No ☐	Yes ☐	
Cemented across injection zone?		No ☐	Yes ☐	
Packer immediately above injection zone (<100')?		No ☐	Yes ☐	No Packer ☐
		If No: Provide Depth:		
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☐	

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Active well.

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-00396

Well No. 3 Jonas V. Alford Farm A
Lease No. 19039 Duval Township District Lincoln County W. Va. S
S.S. Stephens Jr. Contractor Black Drilling Company Inc. Contra
Drilling Commenced May 3 1943 Drilling Completed June 29 1943
N. S. 79 E. W. 75 Elevation Flow 930 Gauge 924

Rock Formation	Top	Bottom	Steel Line Measurement	Remarks
Surface	0	30		
Blue Slate	30	75		396
10¾" Casing		32		
Red Rock	75	100		
Blue Slate	100	105		
Red Rock	105	200		
White Slate	200	260		
Sand	260	275		
White Slate	275	450		8⅝" Casing 339
White Sand	450	525		
Slate	525	700		
Sand	700	750		
Slate	750	860		
Lime Shells	860	900		
Slate	900	1085		
Gas Sand	1085	1110		
Slate	1110	1130		
Salt Sand	1130	1520		Salt Water 1185
Slate	1520	1525		
Salt Sand	1525	1700		
Slate	1700	1705		
Little Lime	1705	1725		

continued below

CASING RECORD AS TALLIED. NOT STEEL LINE MEASUREMEI

	Put in Well		Pulled Out		Left in Well		
Size	Feet	In.	Feet	In.	Feet	In.	Shot Date Amount Sand Result Packer Size Depth Set

Production First 24 Hours.....Bbls. Gas Test.....

47-043-00396

Well No. 3 Jonas V. Alford — Farm — Ac
Lease No. 79059 Duval — Township District: Lincoln — County W. Va. St
S.P. Stephens — Contractor Black Drilling Company - Inc. — Contrac
Drilling Commenced May 3 1943 — Drilling Completed June 29 1943
N. S. 79 E. W. 75 — Elevation Rear 930 Ground

Rock Formation	Top	Bottom	Steel Line Measurement	Remarks
Pencil Cave	1725	1728		
Brg Lime	1728	1912	1728	7" Casing 1745 Ft
Gas		1800		
Gas	1845			
Big Injun Sand	1912	1965		
Slate & Shells	1965	2060		
Hard Shell	2060	2115		
Slate and Shells	2115	2388		
Brown Shale	2388	2407		
Berea Sand	2407	2431	2407	
Oil	2412	2420		
Total Depth		2432	2432	Gas test in Big Lime shot was 1/4 water 1" of Gas test after shot 28/10 ob. 68.22.5 cu/ft. Well 46 Mcf daily - well now 100 bbls oil per day Billed 10 bbls oil from its first days product

CASING RECORD AS TALLIED. NOT STEEL LINE MEASUREME

Size	Put in Well Feet	In.	Pulled Out Feet	In.	Left in Well Feet	In.
10-3/4	82					
8-5/8	339		339			
7	1745					
2" U.E.	2405					

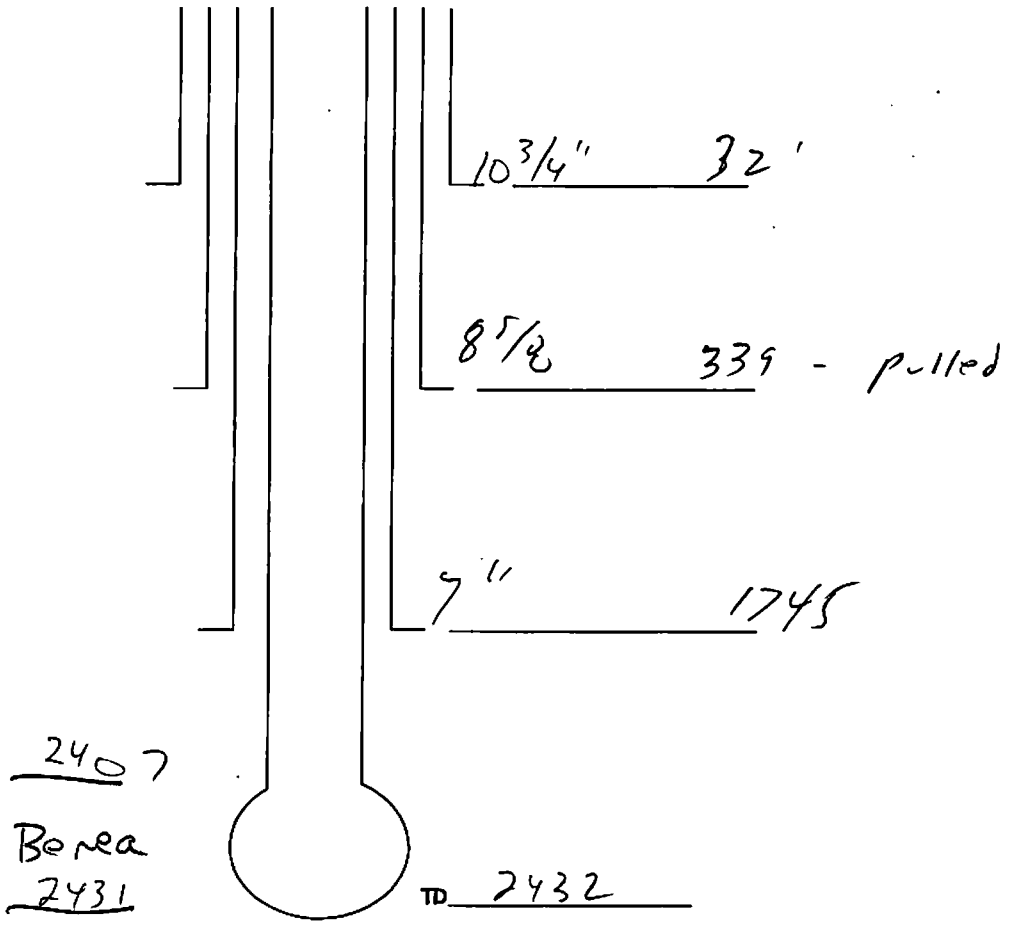
Shot Date First 5/4/43 Second 9/
Amount 90 Qts 150
Sand 2412 - 2431 1792
Result Good - shot caused sand cave making a large shot hole
Packer Size 6 5/8 x 8 1/4 Midget B
Depth Set 1745 Ft.

Production First 24 Hours _____ Bbls. Gas Test _____

TU Alford 3

Griffithsville Unit #2 Field

47-043- 00 396



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

(4)

AOR - Well Review Checklist

API Number: 47- 043 -00397 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 4
Farm Name: J J Alford
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2385
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 418,201 Northing: 4,236,042
Elevation: 266
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐	
Date of Last MIT:	Passed?	No ☐	Yes ☐	
Open Hole Completion		No ☐	Yes ☒	
Well penetrates injection zone?		No ☐	Yes ☒	
Well perforated in injection zone?		No ☒	Yes ☐	
Cemented across injection zone?		No ☒	Yes ☐	
Packer immediately above injection zone (<100')?		No ☐	Yes ☐	No Packer ☐
		If No: Provide Depth:		
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☐	

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-00397

Well No. 4 Jones V. Alford Farm Acres
Lease No. 7059 Duval Township District Lincoln County W. Va. State
S.S. Stephens Rig Contractor Black Drilling Co Dr'g. Contractor
Drilling Commenced 2-2-1943 Drilling Completed 4-20-1943
N. S. 79 E. W. 75 Elevation 830- Fresh 1220- Salt

Rock Formation	Top	Bottom	Steel Line Measurement	Remarks
Surface	0	12		
Lime and Shale	12	20		
Red Mud	20	40		
White Slate	40	60		
Red Mud	60	100		
White Slate	100	140		
Lime Shells	140	150		
White Slate	150	200		
Red Clay	200	220		
White Slate	220	250		
Sand	250	270		
Slate and Shells	270	380		
8 5/8" Casing		304	304	
White Sandstone	380	545		
Slate and Shells	545	595		
White Sandstone	595	695		
Slate and Shells	695	780		
White Sandstone	780	830		
Slate and Shells	830	1045		
Salt Sand	1045	1170		
Slate	1170	1185		
Salt Sand	1185	1355		

Continued below - opposite

CASING RECORD AS TALLIED. NOT STEEL LINE MEASUREMENT.

	Put in Well		Pulled Out		Left in Well	
Size	Feet	In.	Feet	In.	Feet	In.

Shot Date
Amount
Sand
Result
Packer Size
Depth Set

Production First 24 Hours.....Bbls. Gas Test.....

47-043-00397

Well No. 4 Jonas V. Alford Farm Ac
Lease No. 15059 Duval Township District Lincoln County W. Va. St
S.S. Stephens Rig Contractor Black Drilling Co. DH Contrac
Drilling Commenced 2-2-1943 Drilling Completed 4-20-1943
N. S. 79 E. W. 75 Elevation 850 Floor 879.29 Ground

Continued from above - Big Lime

Rock Formation	Top	Bottom	Steel Line Measurement	Remarks
Slate	1355	1363		
Salt Sand	1363	1455		
Slate	1455	1457		
Salt Sand	1457	1560		
White Slate	1560	1564		
Salt Sand	1564	1595		
Slate	1595	1600		
Salt Sand	1600	1628		
Slate	1628	1630		
Maxon Sand	1630	1650		
Slate	1650	1652		
Little Lime	1652	1680		
Penell Cave	1680	1683		
Big Lime	1683	1658		
7" Casing		1700	1700	
Gas	1754	1764		2" Water. 2" C
5½" Casing		1782	1782	
Gas		1802		8" Wat 1" C
Big Injun Sand	1858	1918		
Slate 2nd Shells	1918	1932		
Hard Shells	1932	1975		
Slate 2nd Shells	1975	2015		

Continued next

CASING RECORD AS TALLIED. NOT STEEL LINE MEASUREME

	Put in Well		Pulled Out		Left in Well		
Size	Feet	In.	Feet	In.	Feet	In.	Shot Date Amount Sand Result Packer Size Depth Set

Production First 24 Hours _____ Bbls. Gas Test _____

47,043 - 00397

Well No. 4 Jonas V. Alford Farm Acres
Lease No. 75059 Duval Township District Lincoln County W. Va. State
P.P. Stephens Rig Contractor Black Drilling Co. Dhq. Contractor.
Drilling Commenced 2-2- 1943 Drilling Completed 4-20 1943
N. S. 79 E. W. 75 Elevation 980 Floor 979.89 Ground

Rock Formation	Top	Bottom	Steel Line Measurement	Remarks
Hard Shells	2015	2100		
Slate	2100	2340		
Brown Shale	2340	2360		
Berea Grit	2360	2380		
Oil	2367	2377		1 Bbl. per day
Total Depth		2385		

Acidized 3-24-43 - 700 Gal acid 4800 Gal. Water - No results from acidization.
Gas Test before acidizing 189 M Cu ft. 465# R.P.
Gas Test after acidizing 189 M Cu ft. 465# R.P.

Well producing Oil from Berea Sand - Gas from Big Lime.

CASING RECORD AS TALLIED. NOT STEEL LINE MEASUREMENT.

	Put in Well		Pulled Out		Left in Well	
Size	Feet	In.	Feet	In.	Feet	In.
8 5/8"	304		304			
7"	1700					
5-1/2"	1782		1782			
2"	2375	S.L.				

Shot Date May 17. 1943
Amount 50 Quarts
Sand 2364 - 2382
Result Excellent - Oil increase from 1 bbl. to 15 bbls.
No Fluid in hole when shot.
Packer Size B.H. Midget 7 x 8 5/8 x 12
Depth Set 1730 Ft.

Production First 24 Hours 15 Bbls. Gas Test 189 MCF

Approved by A. L. Crummitt Superintendent

WR-38
Rev. 5/08

API# 47- 043 - 0397

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL & GAS

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE IN TRIPLICATE, one copy mailed to the Department, 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: Jonas V. Alford
Location: Elevation: 892'
District: Duval
Latitude: _____ Feet South of: _____ Deg. _____ Min. _____ Sec.
Longitude: _____ Feet West of: _____ Deg. _____ Min. _____ Sec.

Operator Well No.: No. 4
Quadrangle: Garrett's Bend 7.5'
County: Lincoln

Well Type: Oil X Gas _____ WIW _____

Company: HG Energy LLC
5260 Dupont Road
Parkersburg, WV 26101
Agent: Philip S. Ondrusek

Coal Operator or Owner: NA

Coal Operator or Owner: NA

Permit Issued: 9/26/13

AFFIDAVIT

State of West Virginia, County of Wood ss:

Mark Miller and Roger McComas 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 operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 1st day of October, 20 13 and the well was plugged and filled in the following manner:

TYPE	FROM	TO	PIPE REMOVED	LEFT
Cement	2378'	2160' (tag)	5 3/6" 0'	782'
Cement	1854'	1650'	6 5/8" 0'	1700'
Cement	1141'	1019' (tag)		
Cement	506'	254'		
Cement	204'	0'		
	Perforated5 3/16" & 6 5/8" casing 1780' - 1754', 1702' - 1676' - 1650',			
	1125' - 1100' & 1075' - 1050', 500' - 400', 35' - 300', 275' - 255', and 200', 175',			
	150', 125' & 100'.			
6% Gel Between Cement Plugs				

Description of monument: 7" x 4' and that the work of plugging and filling said well was completed on the 15th day of October, 20 13

And further deponents saith not. Mark Miller

Roger McComas

Sworn and subscribed before me this 21st day of October, 20 13

My commission expires: 4/26/2020

Notary Public

Affidavit reviewed by the Office of Oil and Gas: Ralph D. Triplett

Title: District Inspector

RECEIVED
Office of Oil and Gas
OCT 23 2013
WV Department of Environmental Protection

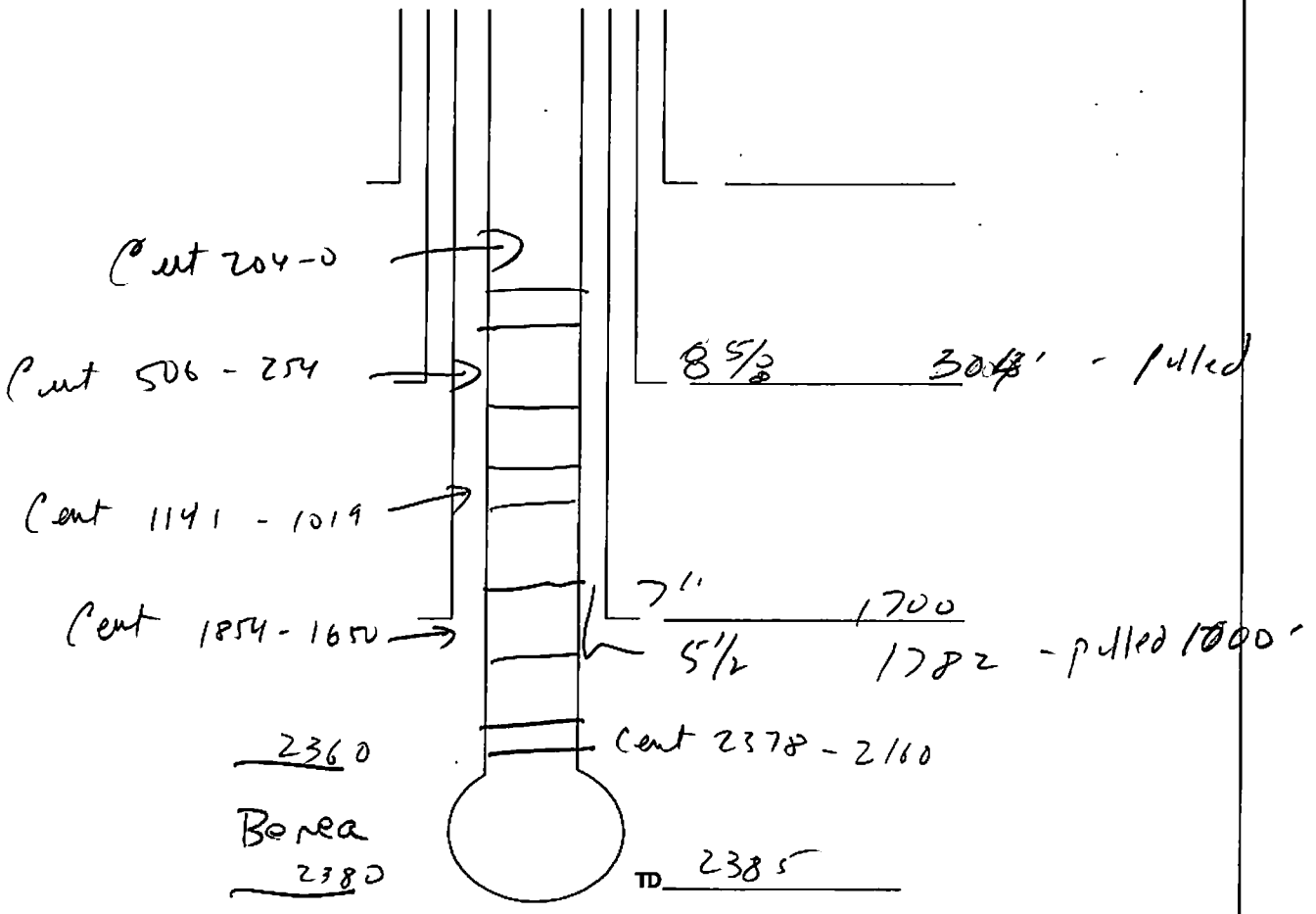
OFFICIAL SEAL
NOTARY PUBLIC
STATE OF WEST VIRGINIA
TIMOTHY P. ROUSH
P. O. Box 5519
Vienna, West Virginia 26105
My Commission Expires Apr. 26, 2020

WR-38 Affidavit of Plugging and Filling Well 10/23/2013

JU Alford 4

Griffithsville Unit #2 Field

47-043- 00397



From Drillers Records/Plugging Records

Reported Casing

WVDEP OOG Internal Use Only
Rev. 6/14/16

(5)

AOR - Well Review Checklist

API Number: 47- 043 - 00474 Area Permit Number: 2R AP
Operator Name: H6 E
Operator's Well #: 5
Farm Name: JV Alford
Field Name: Guthrie #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☐ Producer (NonWaterflood) ☑ Observation ☐ Other ☐
Well Status: Active ☒ Abandoned ☐ Plugged ☐
TD of well: 2381
Completion Zones: Berea Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 418,211 Northing: 4,236,430
Elevation: 273
Inside Field Boundary? ☐ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☑	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☐

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-00474

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

WELL RECORD

DEC 1944 WEST VIRGINIA DEPARTMENT OF MINES

Permit No. Lin-474

Company South Penn Natural Gas Company
Address Union Trust Bldg.Parkersburg,W.Va.
Farm Jonas V. Alford Acres 123
Location (waters) -----
Well No. 5 Elev. 883.07
District Duval County Lincoln
The surface of tract is owned in fee by E. E. Alford
Garretts Bend, W. Va.
Mineral rights are owned by Jonas V. Alford et al
same as above Address
Drilling commenced January 29, 1944
Drilling completed April 8, 1944
Date Shot 4/18/44 From 2360 To 2381
With 90 quarts
Open Flow /10ths Water in ----- Inch
/10ths Merc. in ----- Inch
Volume ----- Cu. Ft.
Rock Pressure ----- lbs. ----- hrs.
Oil 20 bbls per week bbls., 1st 24 hrs.
Fresh water ----- feet ----- feet
Salt water 1125 feet feet

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			
16			Kind of Packer
13			Midget B.H.
10			Size of
8¼ 8-5/8	327	Pulled	6-5/8x8¼x6
6¾ 7	2023		Depth set 2023
5 3/16			
3			Perf. top
2			Perf. bottom
Liners Used			Perf. top
			Perf. bottom

CASING CEMENTED ---- SIZE ---- No. Ft. ---- Date

COAL WAS ENCOUNTERED AT ---- FEET ---- INCHES
---- FEET ---- INCHES ---- FEET ---- INCHES
---- FEET ---- INCHES ---- FEET ---- INCHES

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks
Earth				30			
Blue Slate			30	80			
Red Rock			80	100			
Slate & Lime			100	150			
White Slate			150	200			
Red & Blue Slate			200	250			
White Slate			250	315			
Sand			315	322			
Slate			322	400			
Sand			400	530			
Black Slate			530	555			
Sand			555	605			
Slate			605	630			
Sand			630	645			
Black Slate			645	660			
Slate & Shells			660	825			
Lime Shells			825	870			
Black Slate			870	995			
Lime			995	1040			
Slate & Shells			1040	1080			
Salt Sand			1080	1480	Water	1125	Hole full
Lime & Slate			1480	1500			
Sand			1500	1650			
Slate			1650	1656			
Little Lime			1656	1676			
Pencil Cave			1676	1680			
Big Lime			1680	1856			
Big Unjun Sand			1856	1905			
Slate & Shells			1905	2014			
Big Shell			2014	2110			
Slate & Shells			2110	2350			
Brown Shale			2350	2359			
Berea Sand			2359	2380	Oil Gas	2365-2375 2365-Show	
Slate			2380	2381			
Total Depth				2381			

(Over)

47.043-00474
Jones V. Alford #5

Formation	Cols.	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks

Remarks: 125 ft. of oil in hole before shot. Well was completed April 8, 1944, but were unable to get rig built until June.

Date December 9, 1944, 194

SOUTH PENN NATURAL GAS COMPANY,

APPROVED _____, Owner

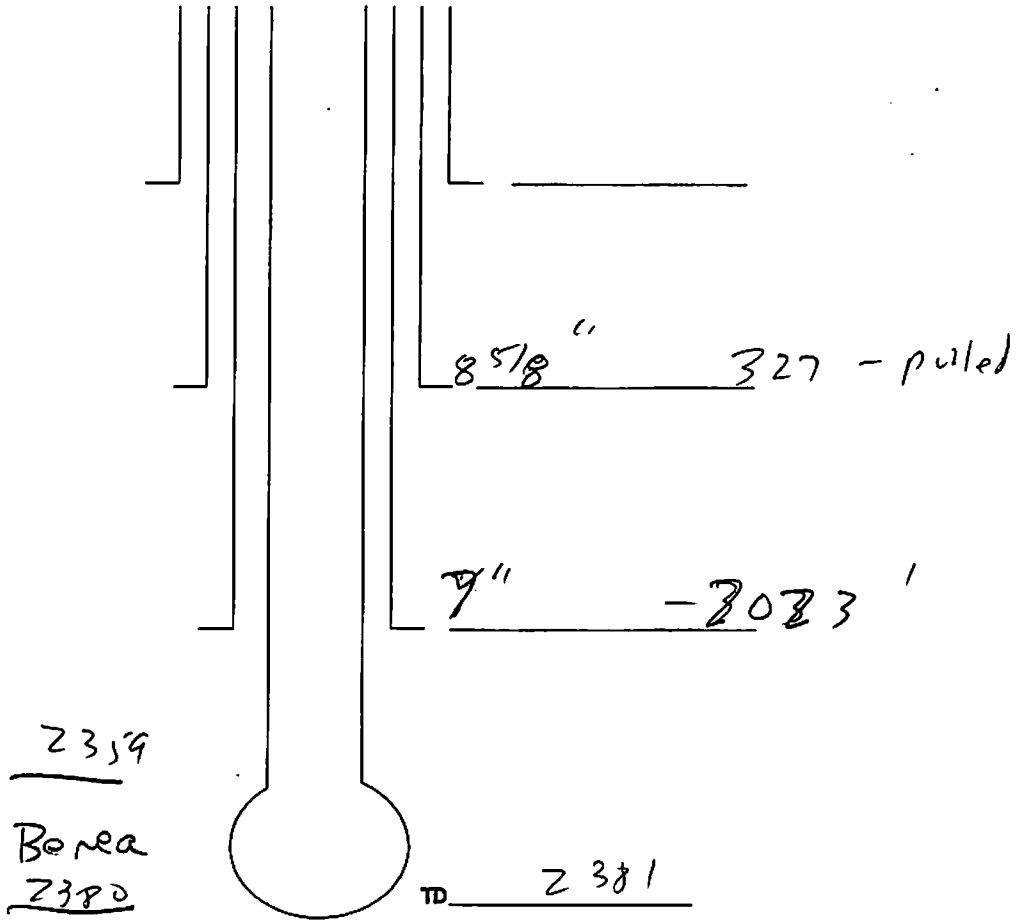
By _____

(Title) Land Agent.

J V Alford 5

Griffithsville Unit #2 Field

47-043- 00474



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

(6)

AOR - Well Review Checklist

API Number: 47- 043 - 00476 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 6
Farm Name: JV Alford
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2317
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 418,609 Northing: 4,236,345
Elevation: 250'
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = 0
Bottom Hole Injection Pressure 0
Hydrostatic Pressure 0

Comments:

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

lo. 75059 Acres 123 Farm Name ALFORD, Jonas V. 47-043-00474 Well No. 6

1 Mi. N.W. from Tenga Waters of Read Fork at Trace Fork
Map 124W

S. 79 E. W. 75

ist\ ) Duval

Lincoln

"est Virginia

ghts Owned By

Location Made January 6, 1944

Rig Completed May 12, 1944

Dr'g Commenced January 21, 1944

Dr'g Completed March 14, 1944

Dr'g Contractor S.P.N.G.Co. Drlg. Tools

Purchased From

Date Purchased

Sold To

Date Sold

Date Abandoned

FORMATION

Kind	Top	Bottom	Steel Line Measurement	Tests
ce		8		
ock	8	80		
	80	125		
	125	165		
& Shells	165	300		
" casing		273	273	
	300	480		
& Shells	480	535		
	535	560		
& Shells	560	735		
	735	770		
& Shells	770	880		
	880	930		
& Shells	930	950		
	950	1000		
S)	1000	1580		
		1028		Hole Full
le Lime	1580	1605		
	1605	1608	1608	
LIME	1608	1792		
	1792	1795		
INJUN Sand	1795	1848		
Shells	1848	1858		
& Shells	1858	1948		
Shell	1948	2005		
asing		1959	1959	
& Shells	2005	2265		
Shale	2265	2290	2290	
Sand	2290	2312		
	2295	2307		Show
	2312	2317	2317	
		2317		
L. DEPTH				

CASING RECORD

Size	Bottom Casing (Steel Line)	Put In Well (Tally Meas.)	Pulled (Tally Meas.)	Cemented
8-5/8	273		273	Date
7	1959			Size Csg.
2" U.E.	2300			Top "
				Bot. "

PACKERS AND SHOES

Kind	Size	Depth Set	Date Set
Midget Bottom Hole	6-5/8"x8¼	1959	arch 9,1944

TORPEDO RECORD

Date	No. Qts.	Size Shell	Top Shot	Bottom	Results
March 16,1944	90	6'6"x5½	2295	2314	Fair

DRILLING DEEPER

Commenced	Completed	Original Depth	Final Depth	Contractor

ABANDONMENT RECORD

Filled With	From	To	PLUG Size	PLUG Kind	PLUG Depth

APPROVED

Supt.

rod.	Sand	★ At Completion	☆ 30Days After	★
	Berea	8BBls.Wk.		

47-043-00476
Jones V. Alford #6

API # 47-43-00476-P

WR-38
12-Nov-97

STATE OF WEST VIRGINIA
DIVISION OF ENVIRONMENTAL PROTECTION
SECTION 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: H. L. Torman — Operator Well No.: Alford # 6
LOCATION: Elevation: 807.57 — Quadrangle: Garretts Bend
District: Duval — County:
Latitude: 7400 Feet South of 38 Deg. Min. 17 Sec.30
Longitude 4000 Feet West of 81 Deg. Min. 55 Sec. 0

Well Type: OIL X GAS ____

Company: B. L. Meadows, Jr. Production, Inc.
ROUTE 2 BOX 22
RAVENSWOOD, WV 26164

Coal Operator or owner N/A

Agent: B. L. Meadows, Jr.

Coal Operator or owner N/A

RECEIVED
Office of Oil & Gas
JUL 23 1998
WV Dept. of Environmental Protection

Permit issued:

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of ____ ss:

Terry Huffman and Jason Meadows 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 Rod Dillon Oil and Gas Inspector representing the Director, say that said work was commenced on the 16 day of July, 1998, and that the well was plugged and filled in the following manner:

TYPE	FROM	TO	PIPE REMOVED	LEFT
Gel	2317	2150	2" tubing 1600	700
Cement	2150	1950	7 Csg 280	1699
Gel	1950	950		
Cement	950	850	Shot well @ 982	
Gel	850	500	485	
Cement	500	Squeeze Job 400	485	
Gel	400	300	280	
Cement	300	200		
Gel	200	100		
Cement	100	0		

7/24/98

Description of monument: 5 ½ Csg 5 ft long and that the work of plugging and filling said well was completed on the 22 day of July, 1998

And further deponents saith not.

Sworn and subscribe before me this 22 day of July, 19 98
My commission expires: December 24, 2007

Zelma M Meadows
Notary Public

Rodney Dillon
Oil and Gas Inspector

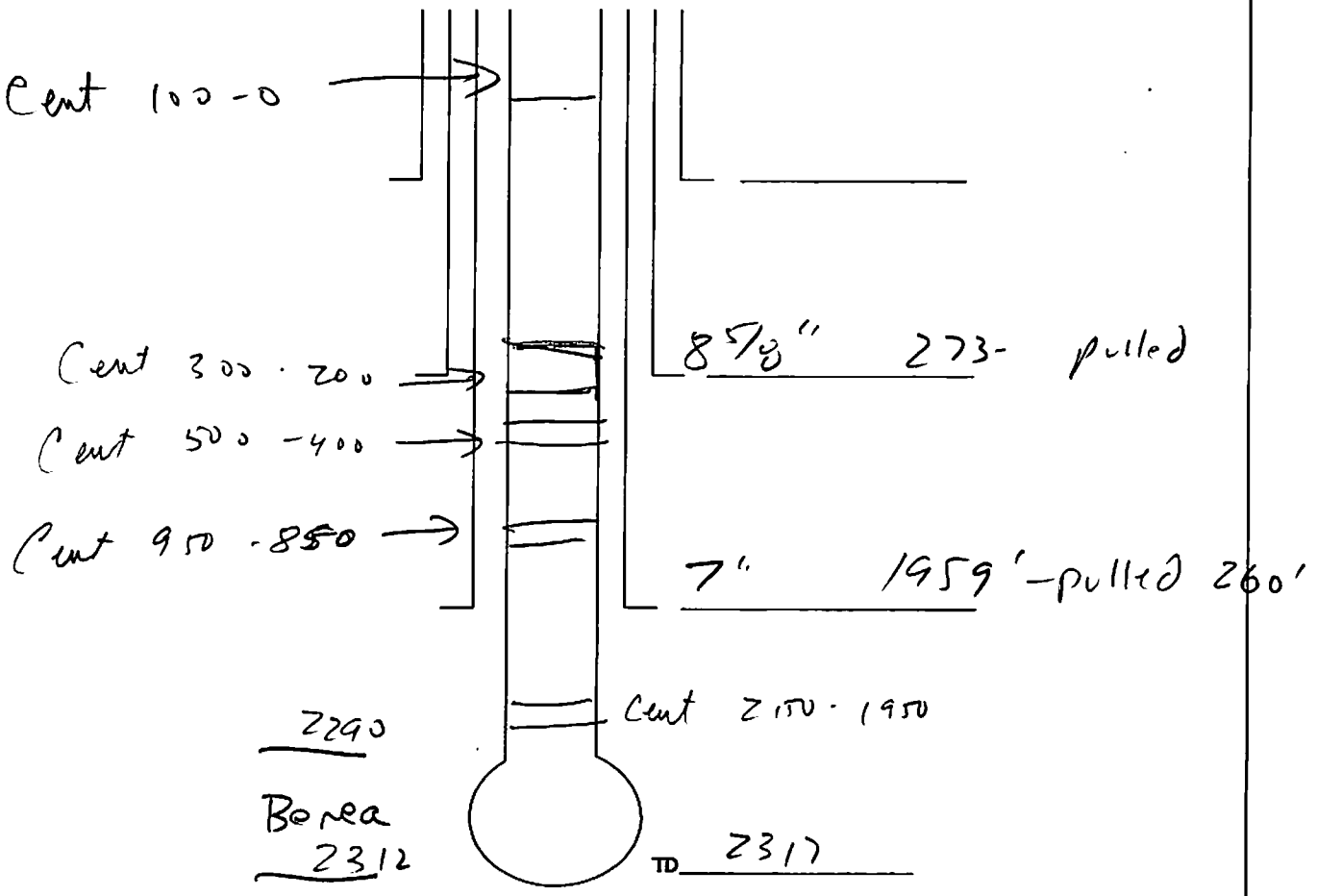
Official Seal
Notary Public, State of West Virginia
Zelma M. Meadows
Route 2, Box 22
Ravenswood, WV 26164
My commission expires December 24, 2007

017606-P

JV Alford 6

Griffithsville Unit #2 Field

47-043- 00476



Perforated 7" csg

From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

(7)

AOR - Well Review Checklist

API Number: 47- 043 - 02203 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 1
Farm Name: Lafayette Alford
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2320
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 418,187 Northing: 4,235,730
Elevation: 946
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = 0
Bottom Hole Injection Pressure 0
Hydrostatic Pressure 0

Comments:

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-02203

Production First 24 Hours from { Berea Sand Bbls. Approved
Sand Bbls. By

Lafayette Alford Farm, No. of Lease No. Acres
Duval District Lincoln County West Virginia State
Well No. One Date of Location 19
Rig Commenced 19
Rig Completed 19 Contractor
Drilling Commenced October 12th, 1909
Drilling Completed November 22rd, 1909 G.L.Titus & Company, Contractor

CASING RECORD

Size	Remained in well: Feet	In.	Put in well: Feet	In.	Bottom of casing: Feet	In.	Pulled out of well: Feet	In.	Left in well: Feet	In.	Withdrawn before completion: Feet	In.	Left in well: Kind	Size
10	21		21		21				21					
8	225		225		225		225							
6-5/8	1615		1615		1615				1615					

Formation	Top	Bottom	Thickness
Water Sand	115	182	
Coal	180	184	
Sand	295	425	
Coal	520	524	
Sand	528	615	
Coal	710	715	
Sand	724	960	
Salt Sand	995	1550	
Maxon Sand	1577	1582	
Little Lime	1582	1609	
Pencil Cave	1609	1614	
Big Lime	1614	1797	
Big Injun Sand	1797	1946	
Black Lime	1944	2020	
Coffee Shale	2280	2301	
Berea Sand	2301	2320	

SHOT RECORD

Month	Day	Yr.	Size Shot	Length of Shell	Top of Shot	Bottom of Shot
1	7	10	110			
3	31	10	170			

REMARKS:

2 - Bailers water at 120'
6 - Bailers Water at 170'
Water in Salt Sand at 1008'
Gas in Big Lime at 1694'

ABANDONED

Date	Casing Pulled	Casing Left In

REMARKS:

WWR-38

API# 47-043-2203

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY
DIVISION 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: Lafayette Alford
LOCATION: Elevation: 812'
District: Duval
Latitude:
Longitude:

Operator Well No.: No. 1
Quadrangle: Garrett's Bend 7.5'
County: Lincoln
Deg. Min. Sec.
Deg. Min. Sec.

Well Type: Oil X Gas WIW

Company: East Resources Inc.
P.O. Box 5519
Vienna, WV 26105
Agent: Philip S. Ondrusek
Inspector: Ralph Triplett
Permit Issued: 10/21/09'

Coal Operator or Owner: NA

Coal Operator or Owner: NA

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Wood ss:
Mark Miller and Paul Stevens 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 East Resources Inc., well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 13th day of November, 2009', and that the well was plugged and filled in the following manner:

TYPE	FROM	TO	PIPE REMOVED	LEFT
Cement	2249'	2150'	6 5/8" - 0'	1616'
Cement	1804'	1560'	5 3/16" - 1,636'	0'
Cement	1013'	900'		
Cement	750'	650'		
Cement	352'	250'		
Cement	119'	0'		
		Peforated 6 5/8" Casing, 3 shots- 952' - 948'; 702'-698';		
		302'-298' & 101'-97'.		
6% Gel Between Cement Plugs				

Description of monument: 5 1/2" x 5'
and that the work of plugging and filling said well was completed on the 2nd day of December, 2009'
And further deponents saith not.

Mark Miller
Roger McClennan

Sworn and subscribe before me this 8th day of December, 2009

My commission expires: Oct. 4, 2016

Notary Public

Affidavit reviewed by the Office of Oil and Gas:

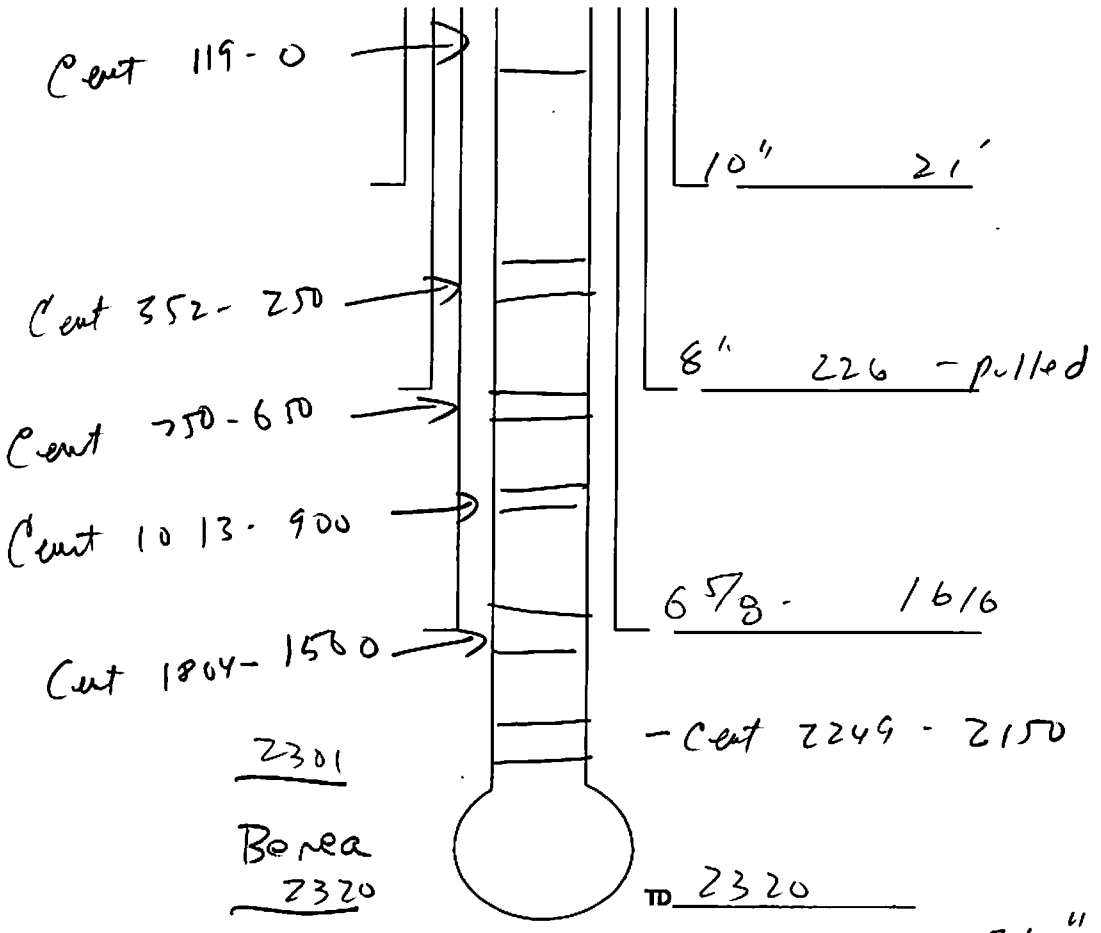
Ralph D Triplett
Title: Deskset Inspector

OFFICIAL SEAL
NOTARY PUBLIC
STATE OF WEST VIRGINIA
S. DIANNE DULANEY
P. O. Box 5519
Vienna, West Virginia 26105
My Commission Expires Oct. 4, 2016

Lafayette Alford 1

Griffithsville Unit #2 Field

47-043- 02203



From Drillers Records/Plugging Records

Pulled 1636' 5 3/16" Csng perforated
6 5/8" casing

WVDEP OOG Internal Use Only
Rev. 6/14/16

(8)

AOR - Well Review Checklist

API Number: 47- 043 - 02204 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 2
Farm Name: Lafayette Alford
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2569
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 417,612 Northing: 14,235,479.
Elevation: 3231
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47.043-0204

Production
First 24 Hours from } ____ Water ____ Sand ____ Bbls. Approved.
____ Sand ____ Bbls. By ____ Supt.

Lafayette Alford Farm, No. of Lease ____ No. Acres
Duval District District Lincoln County West Virginia State
Well No. Two Date of Location ____ 19__
Rig Commenced ____ 19__ } ____ Contractor.
Rig Completed ____ 19__ }
Drilling Commenced August 22nd. 19 15 } Holley Oil & Dev. Company, Contractor.
Drilling Completed October 11th. 19 15 }

CASING RECORD

Size	CHARGED TO WELL Feet	In.	PUT IN WELL Feet	In.	BOTTOM OF CASING Feet	In.	PULLED OUT OF WELL Feet	In.	LEFT IN WELL Feet	In.	TRANSFERRED BEFORE COMPLETION Feet	In.	LEFT AT WELL NOT IN USE Feet	In.
8	345		345		345		345							
1-5/8.	1900		1900		1900				1900					

FORMATION	TOP	BOTTOM	THICKNESS
Red Rock		275	
Lime	275	280	
Slate	280	330	
Red Rock	330	370	
Sand & Slate	370	985	
Red Rock	985	1010	
Sand	1010	1080	
Lime, Sand & Slate	1080	1255	
Salt Sand	1255	1805	
Slate	1805	1810	
Maxon Sand	1810	1848	
Little Lime	1848	1888	
Penoil Cave	1888	1895	
Big Lime	1895	2050	
Big Injun Sand	2050	2080	
Slate & Shells	2080	2519	
Brown Shale	2519	2549	
Berea Sand	2519	2569	

SHOT RECORD

Month	Day	Yr.	Size Shot	Length of Shell	Top of Shot	Bottom of Shot
10	16	15	90			
7	14	14	120			

REMARKS:

ABANDONED ____ 19__

Size	Casing Pulled	Casing Left In	

REMARKS:

IR-38

API # 47-043-02204

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY
DIVISION 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: Rowh, Max & Joselyn Operator Well No.: L. Alford #2

LOCATION: Elevation: 1069.12 Quadrangle: Garrett's Bend
District: Duval County: Lincoln
Latitude: 10,225' South of 38 Deg. 17 Min. 30 Sec.
Longitude 7,250' West of 81 Deg. 55 Min. 00 Sec.

Well Type: OIL X GAS _____

Company: East Resources Inc.
P.O. BOx 5519
Vienna, WV 26105

Coal Operator or Owner: NA

Agent: Mike McCown
Inspector: Larry Parrish
Permit Issued: 11/7/02

Coal Operator or Owner: _____

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Wood ss:

Bill Wade and Terry Huffman 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 East Resources Inc., well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 2nd day of December, 2002, and that the well was plugged and filled in the following manner:

TYPE	FROM	TO	PIPE REMOVED	LEFT
	2511'	2341'	5 1/2"-1504'	595'
Cement	1960'	1780'	6 5/8"-304'	1596'
Cement	1550'	1450'		
Cement	1250'	1150'		
Cement	840'	740'		
Cement	340'	240'		
Cement	100	Surface	Shot 7" Twice @ 1204' and 792'	
6% Gel between Cement Plugs				

Description of monument: 7" x 8'

and that the work of plugging and filling said well was completed on the 13th day of December, 2002

And furthur deponents saith not.

Terry Huffman

Bill Wade

Sworn to and subscribed before me this 17th day of January, 2003

My commission expires 5/4/10

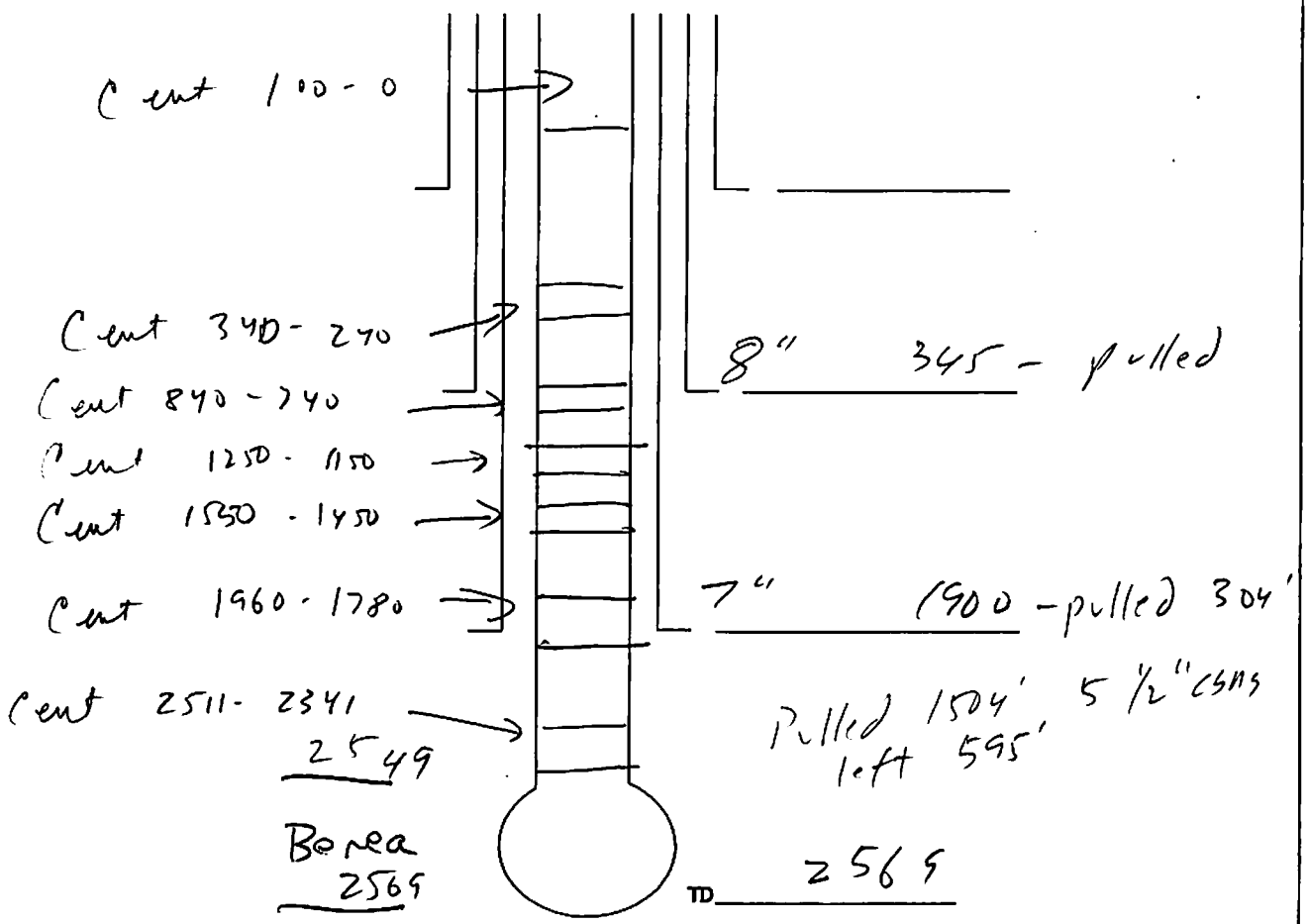
OFFICIAL SEAL
NOTARY PUBLIC
STATE OF WEST VIRGINIA
DIRK F. ANDERSON
PennzEnergy
P.O. BOX 6519

Dirk F. Anderson
Notary Public

L Alford 2

Griffithsville Unit #2 Field

47-043- 02204



From Drillers Records/Plugging Records

(9.)

WVDEP OOG Internal Use Only
Rev. 6/14/16

AOR - Well Review Checklist

API Number: 47- 043 - 02205 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 3
Farm Name: Lafayette Alford
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2540
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 417,581 Northing: 4,235,677
Elevation: 316'
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-0202

Production First 24 Hours from { Oil ____ Sand ____ Bbls. } Approved. ____

Sand ____ Bbls. By ____ Supt.

Lafayette Alford Farm, No. of Lease ____ No. Acres ____

Duval District Lincoln County West Virginia State

Well No. Three Date of Location ____ 19__

Rig Commenced ____ 19__ } ____ Contractor

Rig Completed ____ 19__

Drilling Commenced September 20th, 1916 } Hayland Oil & Gas Company Contractor

Drilling Completed November 17th, 1916

CASING RECORD

Size	CHARGED TO WELL Feet	In	PUT IN WELL Feet	In.	BOTTOM OF CASING Feet	In.	PULLED OUT OF WELL Feet	In.	LEFT IN WELL Feet	In.	TRANSFERRED BEFORE COMPLETION Feet	In.	LEFT AT WELL, NOT IN USE Feet	In.
6-5/8	1870		1870		1870				1870					
3/16	2117		2117		2117				2117					

FORMATION	TOP	BOTTOM	THICKNESS
Sand	679	865	
Shells	865	1065	
Slate	1065	1200	
Salt Sand	1200	1775	
Slate	1775	1793	
Little Lime	1793	1842	
Pencil Cave	1842	1850	
Big Lime	1850	2025	
Big Injun	2025	2076	
Slate	2076	2110	
Lime	2110	2130	
Slate	2130	2501	
Brown Shale	2501	2521	
Berea Sand	2521	2540½	

SHOT RECORD

Month	Day	Yr.	Size Shot	Length of Shell	Top of Shot	Bottom of Shot
11	23	16	50			
1	16	36	40	2-8'	2522	2538

REMARKS:

Three bailers of water at 760 feet

Hole full of water at 1255'

A little gas at 2005 feet

Water at 2050'

Oil & Gas from 2526 to 2532'

ABANDONED ____ 19__

Size	Casing Pulled	Casing Left In

REMARKS:

IV-38 API # 47-043-2205

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY
DIVISION 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: Rowh, Max & Joselyn Operator Well No.: Lafayette.Alford #3

LOCATION: Elevation: 1049' Quadrangle: Garrett's Bend 7.5'
District: Duval County: Lincoln
Latitude: 9,600' South of 38 Deg. 17 Min. 30 Sec.
Longitude 7,325' West of 81 Deg. 55 Min. 00 Sec.

Well Type: OIL X GAS _____

Company: East Resources Inc.
P.O. Box 5519
Vienna, WV 26105

Coal Operator or Owner: NA

Agent: Michael McCown
Inspector: Larry Parrish
Permit Issued: 11/7/2002

Coal Operator or Owner

RECEIVED
Office of Oil & Gas
DEC 11 2002
WV Department of Environmental Protection

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Wood ss:

Bill Wade and Terry Huffman 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 East Resources Inc., well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 12th day of November, 2002, and that the well was plugged and filled in the following manner:

TYPE	FROM	TO	PIPE REMOVED	LEFT
Cement	2410'	2300'	5 1/2" 1403'	714'
Cement	2160'	1960'	7" 210'	1660'
Cement	1450'	1350'		
Cement	1050'	950'		
Cement	550'	450'		
Cement	250'	150'		
Cement	100'	Surface		
			Shot 7" csg @ 1008, 803, 511'	
6% Gel Between Cement Plugs			311'	

Description of monument: 7" x 8'

and that the work of plugging and filling said well was completed on the 21st day of November, 2002.

And furthur deponents saith not.

Terry Huffman
Bill Wade

Sworn and subscribe before me this 9th day of December, 2002
My commission expires: 5/12/10

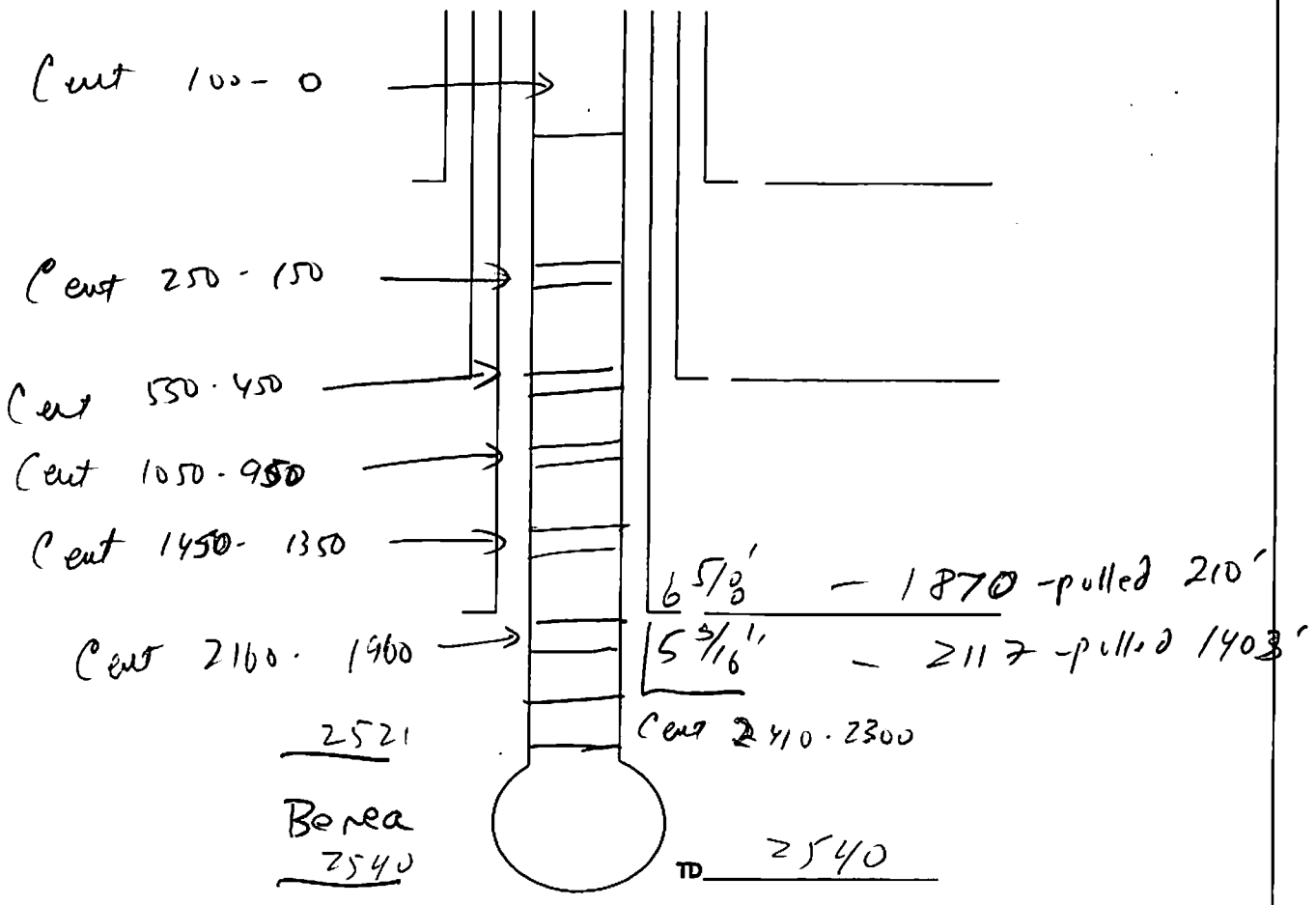
Notary Public

LIN 2205

L Alford 3

Griffithsville Unit #2 Field

47-043- 02205



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

(10)

AOR - Well Review Checklist

API Number: 47- 043 - 02206 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 4
Farm Name: Lafayette Alford
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2518
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 417,762 Northing: 4,235,327
Elevation: 300
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-02206

Well No. 4 Lafayette Township or District Alford Farm 86 Acres
Lease No. 75060 Duval Contractor Lincoln County W. Va. State
Saul & Stephens Contractor S. F. Drg. Dept. Contractor
Drilling Commenced Mar. 11 1929 Drilling Completed Apr. 26 1929
N. S. 80 E. W. 75

Rock Formation	Top	Bottom	Steel Line Measurement	Remarks
Conductor		11'		
Red Mud	0	210	El= 897.4	
Sand	210	325	900.0	
Slate	325	360		
Sand	360	390		
Slate	390	455		
Sand	455	505		
Coal	505	510		23 1/2
Sand	510	575		
8 1/4" Casing		550'		
Slate	575	600		
Sand	600	750		
Slate	750	765		
Sand	765	790		
Slate	790	880		
Lime	880	920		
Slate	920	1125		
Salt Sand	1125	1758-		
Water Hole Full, Salty	1210			
Little Lime	1758	1788		
Pencil Cave	1788	1794		
Big Lime	1794	1988	1794	
6 5/8" Casing		1812	1812	

CASING RECORD AS TALLIED. NOT STEEL LINE MEASUREMENT

Size	Put in Well Feet	In.	Pulled Out Feet	In.	Left in Well Feet	In.

Shot Date
Amount
Sand
Result

Continued

Packer Size

Depth Set

Production First 24 Hours ..... Bbls. Gas Test.....

Approved by..... Superintendent

43-02206

47-043-02206

Well No. 4 Lafayette Township/District Alford Farm 86 Acres
Lease No. 75060 Duval Lincoln County W. Va. State
Saul & Stephens Contractor S. P. Drg. Dept. Contractor
Drilling Commenced Mar. 11 1929 Drilling Completed Apr. 26 1929.
N. S. 80 E. W. 75

Rock Formation	Top	Bottom	Steel Line Measurement	Remarks
Big Lime	1988	2025		
Slate	2025	2100		
Lime	2100	2190		
Slate	2190	2458		
Brown Shale	2458	2478		
Berea Sand	2478	2498		
Oil	2480	2493		
Total Depth		2518	2518	Filled back to 2498' when tubed.
				Shot 4-20-37-80 qts. at 2490-2498 ft

CASING RECORD AS TALLIED. NOT STEEL LINE MEASUREMENT

	Put in Well		Pulled Out		Left in Well	
Size	Feet	In.	Feet	In.	Feet	In.
8 1/4"	551	—			551	
6 5/8"	1827	—			1827	
7"	2498					
5 1/2	1900					

Shot Date 4-27-29.
Amount 80 qts.
Sand Berea (2479-2496)
Result Open flow

Packer Size 6 5/8" X 8 1/4" X 5" Midget B.H.P.
Depth Set 1812

Production First 24 Hours 3 1/2 Bbls. Gas Test.....

Approved by R. H. Amsbury Superintendent

API# 47-043-2206

WWR-38

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY
DIVISION 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: Lafayette Alford
LOCATION: Elevation: 990'
District: Duval
Latitude: _____
Longitude: _____

Operator Well No.: No. 4
Quadrangle: ~~Fo~~Garrett's Bend 7.5'
County: Lincoln
Deg. ____ Min. ____ Sec. ____
Deg. ____ Min. ____ Sec. ____

Well Type: Oil X Gas ____ WIW ____

Company: East Resources Inc.
P.O. Box 5519
Vienna, WV 26105
Agent: Philip S. Ondrusek
Inspector: Ralph Triplett
Permit Issued: 04/14/2009'

Coal Operator or Owner: NA
Coal Operator or Owner: NA

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Wood ss:
Mark Miller and Paul Stevens 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 East Resources Inc., well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 28th day of April, 2009', and that the well was plugged and filled in the following manner:

TYPE	FROM	TO	PIPE REMOVED		LEFT
Cement	2452'	2350'	8 1/4"	0'	1241'
Cement	1980'	1880'	6 5/8'	586'	0'
Cement	1100'	1000'	5 3/16"	1800'	551'
Cement	600'	500'			
Cement	200'	0'			
		Perforated 6 5/8" Csg - 3 Shots - 1050'-1047'			
		Perforated 68 1/4" Casing - 3 Shots 200'-197'			
6% Gel Between Cement Plugs					

Description of monument: 7" x 5'
and that the work of plugging and filling said well was completed on the 1st day of May, 2009
And further deponents saith not.

Mark Miller
Paul Stevens

Sworn and subscribe before me this 30th day of May, 2009

My commission expires: Oct. 4, 2016

S. Dianne Dulaney
Notary Public

Affidavit reviewed by the Office of Oil and Gas:

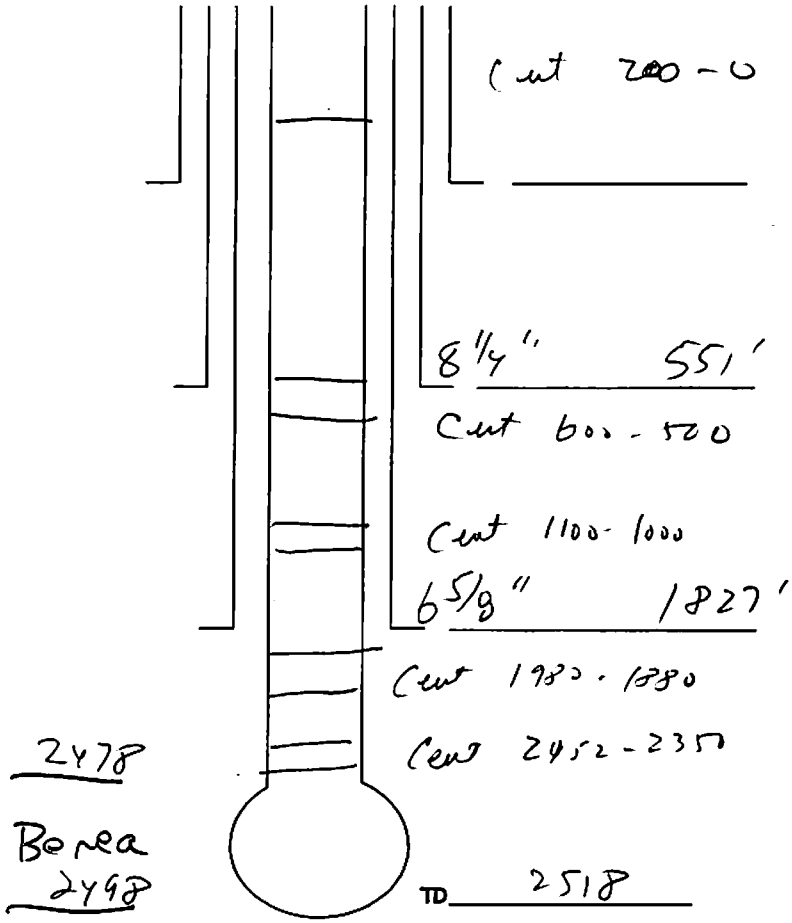
Ralph D. Triplett
Title: District Inspector

OFFICIAL SEAL
NOTARY PUBLIC
STATE OF WEST VIRGINIA
S. DIANNE DULANEY
P. O. Box 5510
Vienna, West Virginia 26105
My Commission Expires Oct. 4, 2016

L Alford 4

Griffithsville Unit #2 Field

47-043- 02208



Perforated Casing - unable to pull

From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

(11)

AOR - Well Review Checklist

API Number: 47- 043 - Area Permit Number: 2R AP
Operator Name: H6 Energy LLC
Operator's Well #: #1
Farm Name: OF Bell
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☐ Producer (NonWaterflood) ☒ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well:
Completion Zones: Berea Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 416,407 Northing: 4,235,179
Elevation: 310
Inside Field Boundary? ☐ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☐

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

UN 35 + 38 NA

Reviewer Name: Signature:
Date Reviewed:

** Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

WVDEP OOG Internal Use Only
Rev. 6/14/16

(12)

AOR - Well Review Checklist

API Number: 47- 043 - 02211 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 2
Farm Name: Oscar Bell
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2390
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 416,271 Northing: 4,235,052
Elevation: 266
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐	
Date of Last MIT:	Passed?	No ☐	Yes ☐	
Open Hole Completion		No ☐	Yes ☒	
Well penetrates injection zone?		No ☐	Yes ☒	
Well perforated in injection zone?		No ☒	Yes ☐	
Cemented across injection zone?		No ☒	Yes ☐	
Packer immediately above injection zone (<100')?		No ☐	Yes ☐	No Packer ☐
		If No: Provide Depth:		
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒	

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47.043-02211

No. of Well No. 2 on Oscar Dill Farm Acres [illegible]
Elev. Field, Duke District Lescarlet County [illegible]
Rig Commenced ____ 19__ Completed ____ 19__
Drilling Commenced Apr 6 1910 Completed May 20 1910
Cost per foot, 1.00 Contractor, Wolfe Bros Address Glenville
Driller's Names, E.L. Wilburgone & Albert Bandstra

CONDUCTOR AND CASING USED IN DRILLING.

uctor	13 Inch	10 Inch	8¼ Inch	6 Inch	7¼ Inch	6¼ Inch	5¼ Inch	5¼ Inch	5 Inch	4¼ Inch
1				315'		1680				

CONDUCTOR AND CASING LEFT IN WELL.

uctor	13 Inch	10 Inch	8¼ Inch	6 Inch	7¼ Inch	6¼ Inch	5¼ Inch	5¼ Inch	5 Inch	4¼ Inch
1						1680				

OIL WELL — GAS WELL

Shot	Size of Torpedo	Hrs Dry's Production	Tubing	Sacks		Size of Packer	Depth Set	Tubing	Final Shut-in Pressure	Rock Pressure
1	80 qts	22 hrs	7"	120	qts					

FORMATION	Top	Bottom	Thickness	REMARKS
Soil	-	40	40	Fresh water at 70'
Sand	40	100	60	12 Barrow Pier shows
Slate	100	150	50	Well holed with water
Sand	150	200	50	Gas in Sand at 1135'
Slate	200	250	50	
Sand	250	280	30	Gas in Big Lime at 1800'
Slate	280	350	70	
Sand	350	480	130	
Slate	480	530	50	
Sand	530	700	170	
Slate & Shells	700	1035	335	
Big Lime	1035	1600	565	
Slate	1600	1640	40	
Keener Sand	1640	1670	30	
Slate & Shells	1670	1680	10	
Little Lime	1680	1860	180	
Pencil Cave	1860	1905	45	
Big Lime	1905	2368	463	
Big Injun	2368	2386	18	
Slate	2386	2390	4	

Office of Oil & Gas Permitting
JUL
RECEIVED
Office of Oil & Gas
WV Department of Environmental Protection
AUG 02 2001
WV Department of Environmental Protection

2-38

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY
DIVISION OF OIL AND GAS

COPY

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: Morris, IL etal Operator Well No.: O.F. Bell #2

LOCATION: Elevation: 882.29' Quadrangle: Garretts Bend 7.5'
District: Duval County: Lincoln
Latitude: 11,650' South of 38 Deg. 17 Min. 30 Sec.
Longitude 11,600' West of 81 Deg. 55 Min. 00 Sec.

Well Type: OIL X GAS ____

Company: East Resources Inc.
P.O. BOx 5519
Vienna, WV 26105

Coal Operator or Owner ____

Coal Operator or Owner ____

Agent: Michael McCown
Inspector: Gary Scites
Permit Issued: 7/18/02

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Wood ss:

Terry Huffman and Bill Wade 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 East Resources, Inc., well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 21st day of March, 2003, and that the well was plugged and filled in the following manner:

TYPE	FROM	TO	PIPE REMOVED	LEFT
Cement	2350	2166		
Cement	1904	1783	5 1/2 1770'	0
Cement	1734	1613	7" 8'	1672'
Cement	952	831		
Cement	510	389		
Cement	374	110	Shot 7" @ 110, 130, 170, 210, 249,29	
Cement	100	0	493,914	
6% Gel Between Plugs				

Description of monument: 8' X 7"

and that the work of plugging and filling said well was completed on the 1st day of April, 2003.

And furthur deponents saith not.

Terry Huffman
Bill Wade

Sworn and subscribe before me this 7th day of May, 2003

My commission expires: Oct. 10, 2006

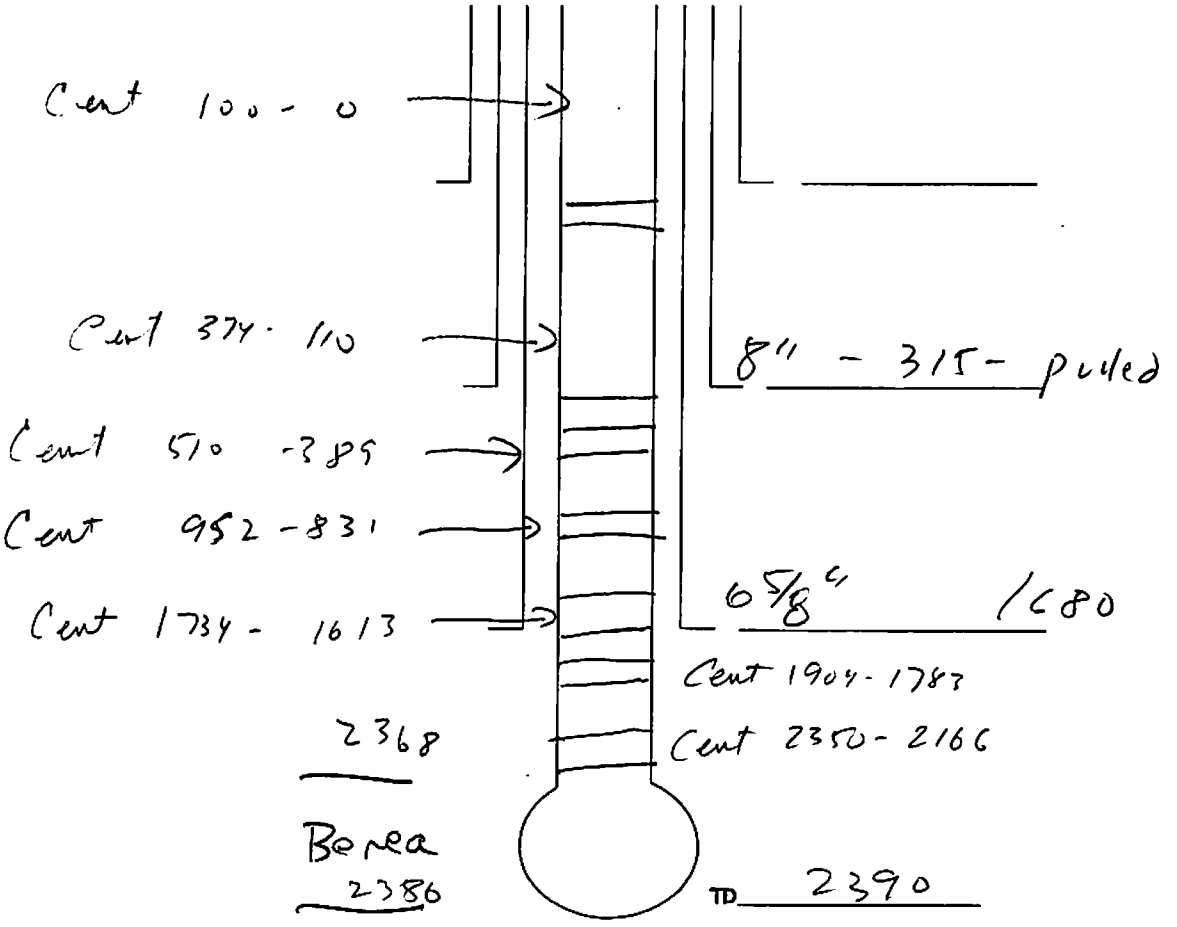
OFFICIAL SEAL
NOTARY PUBLIC
STATE OF WEST VIRGINIA
S. DIANNE DULANEY

S. Dianne Dulaney
Notary Public

Oscar Bell 2

Griffithsville Unit #2 Field

47-043- 02211



Pulled 1770' 5 1/2" csng

Pulled 8' 7" csng

Reported casings

From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

(13)

AOR - Well Review Checklist

API Number: 47- 043 - 31024 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 3
Farm Name: OF Boll
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2581
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 416,492 Northing: 4,235,000
Elevation: 313
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:
Date Reviewed:

** Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

OG-10

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

WELL RECORD

47-043-31024

Oil or Gas Well (KIND)

Permit No.

Company HAL PACK AND COMPANY
Address HAMLIN, WEST VIRGINIA
Farm O. F. Ball Acres 76
Location (waters) Elev. 1052.82' Duval
Well No. 3
District Duval County Lincoln
The surface of tract is owned in fee by
Address
Mineral rights are owned by
Address
Drilling commenced
Drilling completed 4/11/10
Date Shot From To
With
Open Flow /10ths Water in Inch
/10ths Merc. in Inch
Volume Cu. Ft.
Rock Pressure lbs. hrs.
Oil bbls., 1st 24 hrs.
Fresh water feet feet
Salt water feet feet

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Packer
16			
13			Size of
10			
8¼	1870'	1870'	Depth set
6⅝	1898'	1838'	
5 3/16			Perf. top
3	2561'	2561'	Perf. bottom
2			Perf. top
Liners Used			Perf. bottom

CASING CEMENTED SIZE No. Ft. Dat

COAL WAS ENCOUNTERED AT. FEET INCHE
FEET INCHES FEET INCHE
FEET INCHES FEET INCH

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks
Salt Sand			1190	1820			
Little Lime			1820	1860			
Pencil Cave			1860	1865			
Big Lime			1865	2050			
Big Injun			2050	2100			
Brown Shale			2520	2540			
Berea			2540	2561			
Total Depth				2561			

MAY 1951
DEPARTMENT OF MINES
CHARLESTON, WEST VIRGINIA

(Over)

41-043-31024

FORM OG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

LEASE OR PROPERTY OWNER

ADDRESS

HAL PACK AND COMPANY
NAME OF WELL OPERATOR
HALLIN, W. VA.
COMPLETE ADDRESS
NOVEMBER 28, 19 52

WELL AND LOCATION

DUVAL District
LINCOLN County
Well. No. 3
U. K. Hall Farm

STATE INSPECTOR SUPERVISING PLUGGING Dana E. Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

Kyle Roberts and Leslie Adkins 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 Hal Pack & Co., well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 6 day of June, 19 52, and that the well was plugged and filled in the following manner:

COAL OR ZONE RECORD	FILLING MATERIAL			PLUGS USED	CASING	
FORMATION	CONTENT	FROM	TO	SIZE & KIND	CSG PULLED	CSG LEFT IN
	Bridge set at	2520'		7"	800'	1070'
	Neat Cement	2520'	2510'	5½"	1898'	None
	Crushed Stone	5'		2"	2561	None
	Caly	2470'				
	Bridge set at	2100'				
	Neat Cement	2100'	2090'			
	Crushed stone	5'				
	~~Caly~~		1900'			
	Neat Cement	1900'	1890'			
	Crushed Stone	5'				
	Bridge set at	1200'				
	Neat Cement	1200'	1190'			
	Crushed stone	5'				
	~~Clay~~	1150'				
	~~Neat Cement~~	~~1150'~~	~~1140'~~			
	Bridge set at	300'				
COAL SEAMS	Neat Cement	300'	290'	DESCRIPTION OF MONUMENT		
(NAME)	Crushed stone	5'		Erected marker according		
(NAME)	Clay to Surface			Rule 18, 1931 Regulations		
(NAME)						
(NAME)						

and that the work of plugging and filling said well was completed on the 19 day of June, 19 52

And further deponents saith not.

Kyle Roberts
Leslie Adkins

Sworn to and subscribed before me this 28 day of Nov., 19 52

Morris C. Ashworth
Notary Public.

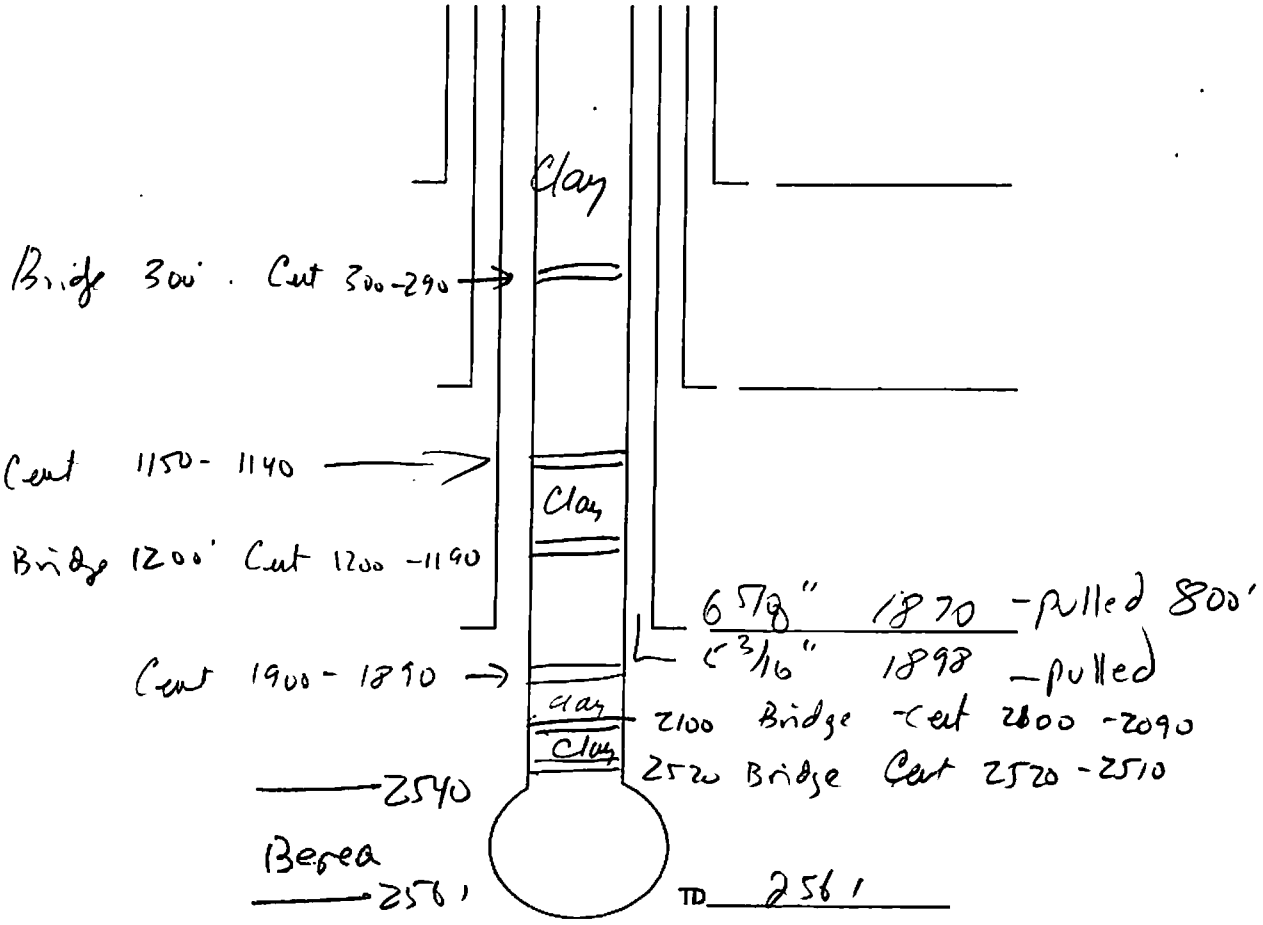
My commission expires:
My Commission Expires March 10, 1960

Permit No. LIN-1024

OF Bell 3

Griffithsville Unit #2 Field

47-043- 31024



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

(14)

AOR - Well Review Checklist

API Number: 47- 043 - 30225 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 4
Farm Name: OF Bell
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well:
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 416,218 Northing: 4,235,259
Elevation: 304
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

35 NA

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-3022S

FORM DG-3

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE. ONE COPY MAILED TO THE DEPARTMENT. 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.

(NO COAL) — COAL OPERATOR OR OWNER
ADDRESS
COAL OPERATOR OR OWNER
ADDRESS
Geo. Weimer, — LEASE OR PROPERTY OWNER
St. Albans, W. Va. — ADDRESS

SOUTH PENN NATURAL GAS COMPANY
Union Trust Building
Parkersburg, W.Va.
COMPLETE ADDRESS
February 25, 1913
WELL AND LOCATION
Duval — District
Lincoln — County
Well No. 4
O. F. Bell — Farm
No.

STATE INSPECTOR SUPERVISING PLUGGING

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

E. L. Saul and Kelley Curnes 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 South Penn Natural Gas Co., well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 6th day of July, 1940, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD — FORMATION	FILLING MATERIAL — CONTENT	FROM	TO	PLUGS USED — SIZE & KIND	CASING — CSG PULLED	CSG LEFT IN
Berea-Big Injun-Big Lime-Little Lime	Rock & Clay	2502	1820			
	Cement	1820	1746			
Baker Cement Retainer		1746	1744		632-6-5/8	1178'
	Rock & Gravel	1744	1730			
Salt Sand	Clay	1730	1120			
	Cement	1120	1110			
	Red Clay	1110	640			
	Cement	640	630			
Slate-Shells,etc	Rock & Gravel	630	10		10' - 10"	
	Rock & Gravel	10	to surface			

COAL SEAMS
(NAME) - - -
(NAME)
(NAME)
(NAME)

DESCRIPTION OF MONUMENT
8-1/4" Casing Extending 5' above ground, filled with cement, inscribed in Cement S.P.N.G. Co. O. F. Bell # 4. Abd. 7-16-40.

and that the work of plugging and filling said well was completed on the 16th day of July

And further deponents saith not.

E. L. Saul
Kelley Curnes

Sworn to and subscribed before me this 5th day of March, 1941

J. R. Smith
Notary Public.

My commission expires: Dec 1-1947

PERMIT No. LIN-225

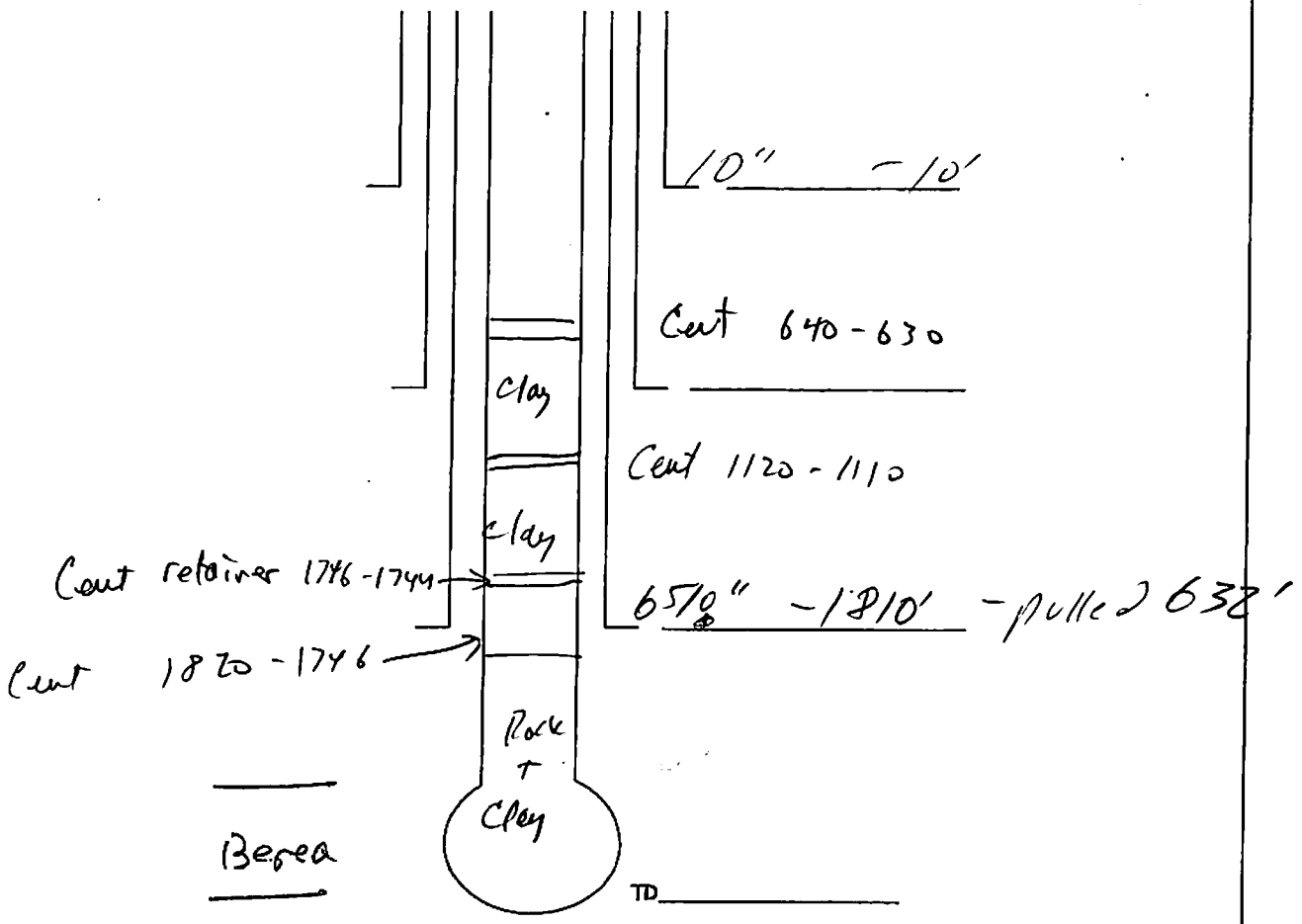
MAR 1941 WEST VIRGINIA DEPARTMENT OF MINES

ANSLEY PRINTING COMPANY, CHARLESTON, W. VA.

OF Bell #4

Griffithsville Unit #2 Field

47-043- 30225



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

(15)

AOR - Well Review Checklist

API Number: 47- 043 - 31301 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 5
Farm Name: OF Bell
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2375
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 416,032 Northing: 4,235,278
Elevation: 263
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = 0
Bottom Hole Injection Pressure 0
Hydrostatic Pressure 0

Comments:

Reviewer Name: Signature:
Date Reviewed:

** Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

Form OG-10

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

47-043-31301

WELL RECORD

Quadrangle _____ Oil or Gas Well _____ (KIND)

Permit No. _____

Company ~~[illegible]~~ South Penn Oil Co.
Address ~~[illegible]~~ Parkersburg, W. Va.
Farm O. F. Bell Acres _____
Location (waters) _____
Well No. 5 Elev. _____
District Duval County Lincoln
The surface of tract is owned in fee by _____
Address _____
Mineral rights are owned by _____
Address _____
Drilling commenced _____
Drilling completed _____
Date Shot 10/17/13 From 2355' To 2371'
With 130 qts.
Open Flow /10ths Water in _____ Inch
/10ths Merc. in _____ Inch
Volume _____ Cu. Ft.
Rock Pressure _____ lbs. _____ hrs.
Oil _____ bbls., 1st 24 hrs.
WELL ACIDIZED _____
WELL FRACTURED _____
RESULT AFTER TREATMENT _____
ROCK PRESSURE AFTER TREATMENT _____
Fresh Water _____ Feet _____ Salt Water _____ Feet _____

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Packer
16			
13			Size of
10			
8¼			Depth set
6⅝	1684'	1684'	
5 3/16	894'7"	894'7"	Perf. top
3			Perf. bottom
2			Perf. top
Liners Used			Perf. bottom

CASING CEMENTED _____ SIZE _____ No. Ft. _____ Date _____

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

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
				28'			
Conductor							
Salt Sand			1020'	1600'			
Little Lime			1640'	1670'			
Pencil Cave			1670'	1675'			
Big Lime			1675'	1840'			
Big Injun Sand			1840'	1900'			
Brown Shale			2334'	2354'			
Berea Sand			2354'	2375'			

DEC 1962
RECEIVED
West Virginia
Dept. of Mines

(over)

47-043-3130

FORM OG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE. ONE COPY MAILED TO THIS DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

G. H. Zerkle
PROPERTY OWNER

Bank of St. Albans
St. Albans, W. Va.

Pack & Jackson
P. O. Box 175 OF WELL OPERATOR
Hamlin, W. Va.
COMPLETE ADDRESS

19

WELL AND LOCATION

Duval District

Lincoln County

Well No. 5

O. F. Bell Farm

STATE INSPECTOR SUPERVISING PLUGGING Dana Lawson, Hamlin, W. Va. (phone 824-3672)

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

Jerry Stephens and Kermit Adkins 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 Hal Pack & Co., well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 2 day of March, 19 63, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD	FILLING MATERIAL	PLUGS USED	CASING	
FORMATION		SIZE & KIND	CSG PULLED	CSG LEFT IN
	Set permanent bridge at 2335'			
	Cement 2335' - 2325'			
	Crushed Stone 2325' - 2320'			
	Mud & Clay 2320' - 1930'			
	Cement 1930' - 1920'			
	Crushed Stone 1920' - 1915'			
	Mud & Clay 1915' - 1714'			
	Parted 6-5/8" casing at 720' and set permanent bridge	6-5/8" Casing	720'	964'
		5-3/16" Casing	894'	None
	Cement 720' - 710'			
	Crushed Stone 710' - 705'			
	Mud & Clay 705' - 655'			
	Set permanent bridge at 250'			
	Cement 250' - 240'			
	Crushed Stone 240' - 235'			
	Mud & Clay 235' - 3'			
	Cement 3' - Surface			
COAL SEAMS		DESCRIPTION OF MONUMENT		
	Erected monument as prescribed by law.	"30" above surface with inscription - "Pack & Jackson Well #5 - abandoned March 26, 1963"		
(NAME)				
(NAME)				
(NAME)				
(NAME)				

and that the work of plugging and filling said well was completed on the 26 day of March, 19 63.

And further deponents saith not.

Jerry Stephens
Kermit Adkins

Sworn to and subscribed before me this 27 day of March, 19 63.

Notary Public.

My commission expires: July 12, 1964

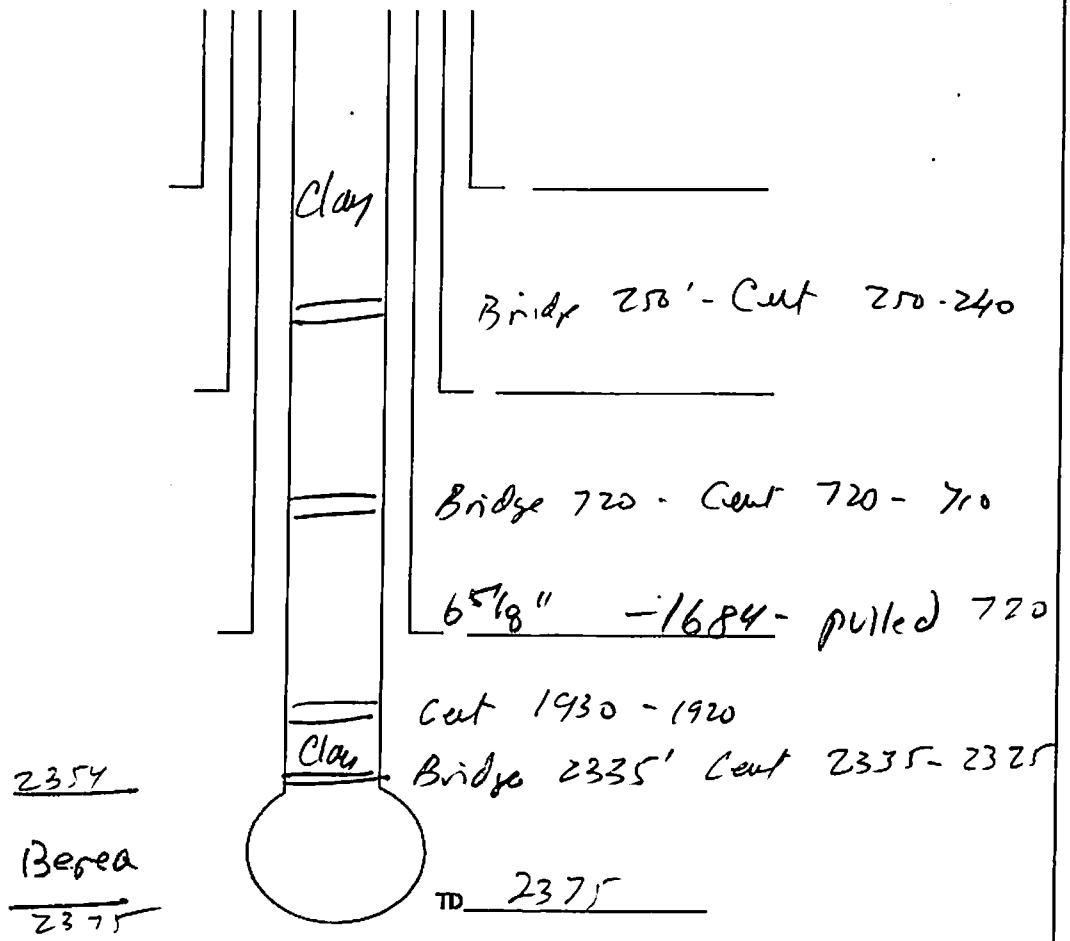
Permit No. LIN-1301

RECEIVED
MAR 1963
West Virginia
Dept. of Mines

OF Bell #5

Griffithsville Unit #2 Field

47-043- 31301



From Drillers Records/Plugging Records

(16)

WVDEP OOG Internal Use Only
Rev. 6/14/16

AOR - Well Review Checklist

API Number: 47- 043 - 02212 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: # 6
Farm Name: BF Bell
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2565
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 416,117 Northing: 4,235,428
Elevation: 322
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

Record of Well No. 6 on C. F. Wells Farm Acres 2 of 100

Old Field, Duvall District Lewis County, W. Va.

47-043-02210

Rig Commenced ..... 19 ..... Completed ..... 19 .....

Drilling Commenced June 7 1911. Completed July 20 1911

Cost per foot, 1.10 Contractor Miller Bros Address, Gwinnett, W. Va.

Drillers' Names, ...

CONDUCTOR AND CASING USED IN DRILLING.

Conductor	13 inch	10 inch	8¼ inch	8 inch	7¼ inch	6¼ inch	6¼ inch	6¼ inch	6 5-16 inch	4¼ inch
15						1885'				

CONDUCTOR AND CASING LEFT IN WELL.

Conductor	13 inch	10 inch	8¼ inch	8 inch	7¼ inch	6¼ inch	6¼ inch	6¼ inch	6 5-16 inch	4¼ inch
15'						1885'				

OIL WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods
7/21/11	90qts.	1 bbl.	1668 8/19/13	1500 ft.

GAS WELL

Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Soil		15	15	430' 10" hole
Red Rock	15	100	85	
Slate	100	150	50	Hole full of gas from
Red Rock	150	175	25	Salt Sand at 1310'
Slate	175	200	25	
Sand	200	225	25	Little Lime at 1380'
Slate	225	340	115	
Sand	340	370	30	Big Lime at 1395'
Slate	370	400	30	
Sand	400	430	30	
Slate	430	460	30	
Sand	460	530	70	
Slate	530	580	50	
Sand	580	900	320	
Slate & Shells	900	970	70	
Sand	970	1000	30	
Slate & Shells	1000	1150	150	
Sand & Slate	1150	1230	80	
Top Salt Sand	1230	1790	560	
Slate & Shells	1790	1830	40	
Little Lime	1830	1865	35	
Pencil Cave	1865	1875	10	
Big Lime	1875	2040	170	
" Lime	2040	2120	80	
Fine Shale	2120	2544	424	
Berea Sand	2544	2565	21	

API# 47- 043 - 2212

WR-38
Rev. 5/08

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL & GAS

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE IN TRIPLICATE, one copy mailed to the Department, 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: O. F. Bell
Location: Elevation: 1063'
District: Duval
Latitude: _____ Feet South of: _____ Deg. _____ Min. _____ Sec.
Longitude: _____ Feet West of: _____ Deg. _____ Min. _____ Sec.

Operator Well No.: No. 6
Quadrangle: Garrett's Bend 7.5'
County: Lincoln

Well Type: Oil X Gas _____ WIW _____

Company: East Resources Inc.
5260 Dupont Road
Parkersburg, WV 26101
Agent: Philip S. Ondrusek

Coal Operator or Owner: NA

Coal Operator or Owner: NA

Permit Issued: 7/5/12

AFFIDAVIT

State of West Virginia, County of Wood ss:

Mark Miller and Roger McComas 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 operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 16th day of July, 20 12 and the well was plugged and filled in the following manner:

TYPE	FROM	TO	PIPE REMOVED	LEFT
Cement	2547'	2428'	6 5/8" 391'	1494'
Cement	2016'	1810'	5 3/16" 1875'	0'
Cement	1286'	1013'		
Cement	460'	350'		
Cement	105'	0'		
			Perforated 6 5/8" Casing 1200' - 1100'	
6% Gel Between Cement Plugs				

Description of monument: 5" x 5' and that the work of plugging and filling said well was completed on the 30th day of July, 20 12

And further deponents saith not. Mark Miller
Roger McComas

Sworn and subscribed before me this 9 day of August, 20 12

My commission expires: Nov. 12, 2018

Notary Public Tina L Peth

Affidavit reviewed by the Office of Oil and Gas: Ralph D. Triplett

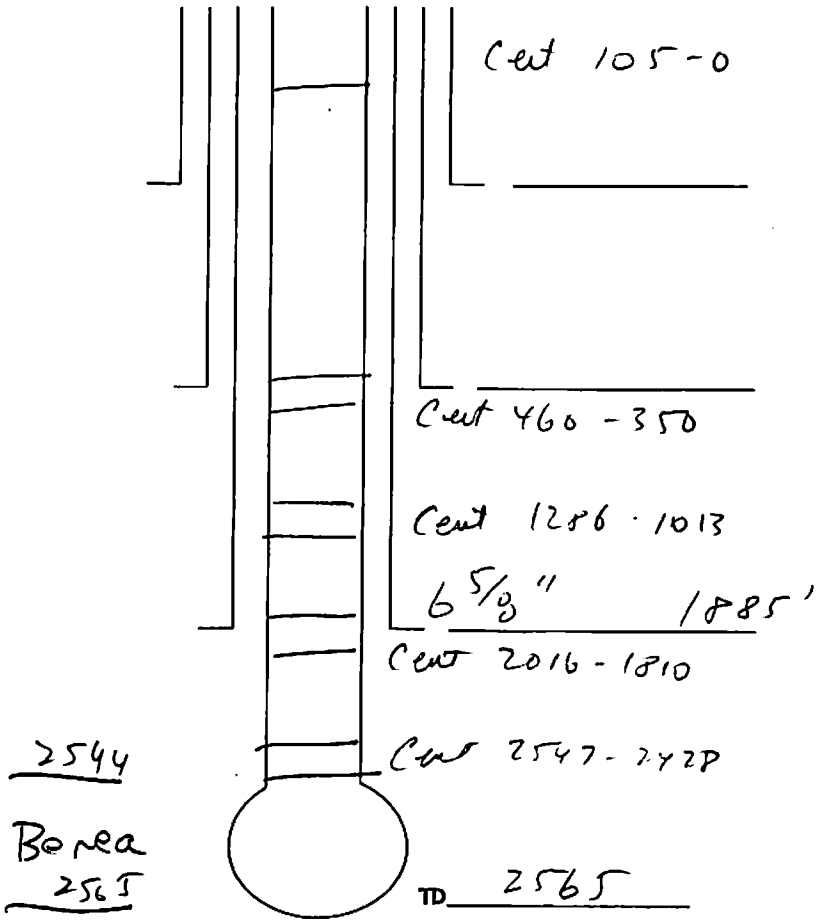
Title: District Inspector

OFFICIAL SEAL
NOTARY PUBLIC
STATE OF WEST VIRGINIA
TINA L. PETHTEL
HG Energy, LLC
5260 Dupont Road
Parkersburg, West Virginia 26101
My Commission Expires Nov. 12, 2018

OF Bell 6

Griffithsville Unit #2 Field

47-043- 02212



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

(17)

AOR - Well Review Checklist

API Number: 47- 043 - Area Permit Number: 2R AP
Operator Name: HG Energy LLC
Operator's Well #: 7
Farm Name: O F Bell
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☐ Producer (NonWaterflood) ☒ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well:
Completion Zones: Berea Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 415,940 Northing: 4,235,496
Elevation: 319
Inside Field Boundary? ☐ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☐

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

WR 35 + 38 NA

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

WVDEP OOG Internal Use Only
Rev. 6/14/16

(18)

AOR - Well Review Checklist

API Number: 47- 043 - 31057 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 1
Farm Name: E P Bell
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2353
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 417,042 Northing: 4,230,838
Elevation: 766
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-31057

Record of Well No. 1 on E P Bell Farm Acres 2 Leffler

Well Field. Laural District County.

Commenced 19 Completed 19

Drilling Commenced Oct 14 1909. Completed Dec 7 1909

Cost per foot, 1.10 Contractor, W. Va. Brilliance Co. Address, Parkersburg W. Va.

Drillers' Names,

CONDUCTOR AND CASING USED IN DRILLING.

Conductor	13 inch	10 inch	8¼ inch	8 inch	7¼ inch	6¼ inch	6¼ inch	6¼ inch	6 5-16 inch	4½ inch
		10				1655'				

CONDUCTOR AND CASING LEFT IN WELL.

Conductor	13 inch	10 inch	8¼ inch	8 inch	7¼ inch	6¼ inch	6¼ inch	6¼ inch	6 5-16 inch	4½ inch
		10'				1655'				

OIL WELL **GAS WELL**

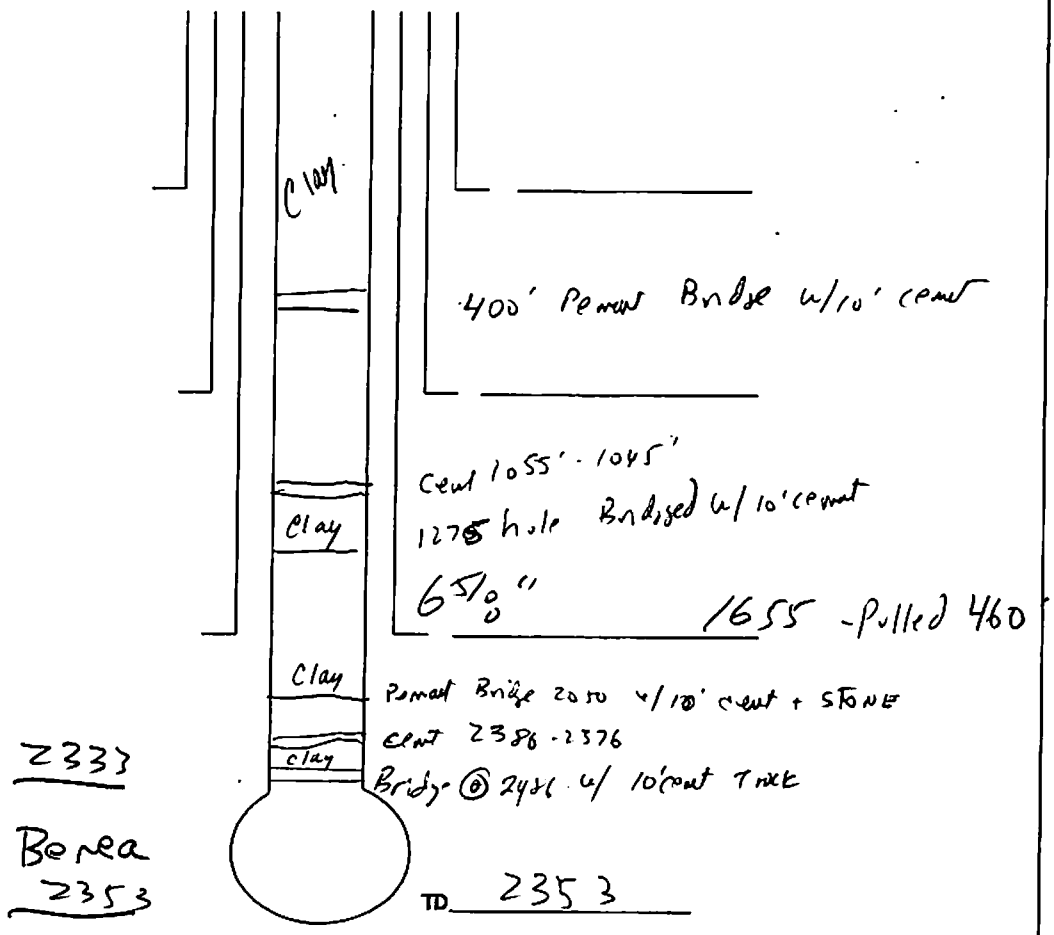
Open Shot	Size of Torpedo	1st Day's Production	Tubing	Rods		Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure
2½	qts	2nd Shot 1/2 7/13	Lost 3rd Shot 7/13			1500				

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Sand & Shale	10	340	330	
Coal	340	345	5	
Sand & Shale	345	920	385	
Salt Sand	920	1580	660	Water, Hole full 1020
Shale	1580	1590	10	
Little Lime	1590	1630	40	
Pencil Cave	1630	1642	12	
Big Lime	1642	1822	180	6¼ Casing 1655'
Injun	1822	1895	73	
Sand & Shale	1895	2250	355	
Weir Sand	2250	2320	70	
Shale & Shells	2320	2333	13	
Berea Sand	2333	2353	20	

EP Bell 1

Griffithsville Unit #2 Field

47-043- 31057



Pulled 1852' 5 3/16"

From Drillers Records/Plugging Records

47-043-31061

FORM OG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

LEASE OR PROPERTY OWNER

ADDRESS

NAME OF WELL OPERATOR: O. S. H. Supply Co.

COMPLETE ADDRESS: Griffithsville, W. Va.

Jan. 21, 1952 19

WELL AND LOCATION

Duval District

Lincoln County

Well. No. 8

E. P Boll. Farm

STATE INSPECTOR SUPERVISING PLUGGING: Dana E. Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

Carter Ruby and J. A. Catron 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 well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 21 day of Aug., 19 51, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD	FILLING MATERIAL			PLUGS USED	CASING	
FORMATION	CONTENT	FROM	TO	SIZE & KIND	CSG. PULLED	CSG LEFT IN
	Set bridge at	2486'				
	2 sacks cement	2486'	2476	5"	1852'	NO
	Crushed stone	5'				
	clay to	2471	2386'	7"	460'	1355
	neat cement	2386	2376			
	Set a per. bridge	2050'				
	2 sacks cement	2050	2040			
	crushed stone	5'				
	fill/clay to		1845'			
	neat cement	1845	1835			
	crushed stone	5'				
	Bridge hole at	1275				
	2 sacks cement	1275	1265			
	crushed stone	5'				
	Fill/w clay	1260	1055			
	cement	1055	1045			
	Set Per. Bridge	400'				
	neat cement	400	390			
	crushed stone	5'				
	fill/w Clay to surface					

COAL SEAMS

(NAME)
(NAME)
(NAME)
(NAME)

DESCRIPTION OF MONUMENT: Erected marker as describe in rule 18, 1931 Reg.

and that the work of plugging and filling said well was completed on the 29 day of Aug., 19 51

And further deponents saith not.

Carter Ruby
J A Catron

Sworn to and subscribed before me this day of Feby, 19 52

J R Cobb
Notary Public.

My commission expires: Oct - 9 - 1957

Permit No. Lin 1061

FEB 1952 WEST VIRGINIA DEPARTMENT OF MINES

WVDEP OOG Internal Use Only
Rev. 6/14/16

(19)

AOR - Well Review Checklist

API Number: 47- 043 - 30477 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 2
Farm Name: EP Bell
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2399
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 417,202 Northing: 4,230,980
Elevation: 271
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:
Date Reviewed:

** Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-30477

Record of Well No. 2 on C. F. Ward Farm ____ Acres ____

Field, ____ District ____ County, ____

Rig Commenced ____ 19__ Completed ____ 19__

Drilling Commenced Sept. 22 1909. Completed Oct. 9 1909

Cost per foot, 1.25 Contractor, Hawley & Dunn Post Office Address, Sistersville.

Drillers' Names, J. C. Hartzell and Harry Lucas

CONDUCTOR AND CASING USED IN DRILLING.

Conductor	13 inch	10 inch	8¼ inch	8 inch	7¼ inch	6¼ inch	6¼ inch	5¼ inch	5 3/16 inch	4¼ inch
16						1690				

CONDUCTOR AND CASING LEFT IN WELL.

Conductor	13 inch	10 inch	8¼ inch	8 inch	7¼ inch	6¼ inch	6¼ inch	5¼ inch	5 3/16 inch	4¼ inch
16						1690				

OIL WELL **GAS WELL**

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods		Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure
11/10	11	22 Bbls	3/4	3/4	1920					

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Soil & clay		16	16	
Red Rock	16	31	15	
Sand	31	131	100	
Slate	131	171	40	
Red Rock	171	211	40	
Sand	211	295	84	
Coal	295	300	5	4 Bailer water at 470
Slate	300	310	10	
Sand	310	355	45	
Slate	355	530	175	
Sand	530	650	120	
Slate	650	700	50	
Sand	700	820	120	
Slate	820	900	80	
Sand	900	960	60	
Lime	960	1000	40	
Salt Sand	1000	1595	595	Salt Sand at Water at 1060
Red Rock	1595	1605	10	
Slate	1605	1640	35	
Little Lime	1640	1650	40	
Pencil Cave	1650	1690	10	
Big Lime	1690	1870	180	
Big Injun	1870	1945	75	
Slate & Shells	1945	2348	403	Gas at 2285
Sun Rock	2348	2378	30	
Sun Sand	2378	2399	21	

47.043 - 3047

FORM OG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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 ADDRESS(ES).

COAL OPERATOR OR OWNER	C. R. De Ley NAME OF WELL OPERATOR
ADDRESS	P. O. Box 49 Hamlin, W. Va. COMPLETE ADDRESS
COAL OPERATOR OR OWNER	31 August 1948 WELL AND LOCATION
ADDRESS	Duval District
South Penn Natural Gas Co. LEASE OR PROPERTY OWNER	Lincoln County
Parkersburg, W. Va. ADDRESS	Well No. Two (2)
	E. P. Bell Farm
STATE INSPECTOR SUPERVISING PLUGGING	D. E. Lewson

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

C. R. De Ley and Guadalupe Seenz 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 C. R. De Ley, well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 20 day of August, 1948, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD FORMATION	FILLING MATERIAL CONTENT	FROM	TO	PLUGS USED SIZE & KIND	CASING CSG PULLED	CSG LEFT IN
Pulled tubing						
Set tree top bridge		2350	2355			
Berea	Red clay	2355	2258			
	Cement	2258	2248			
	Crushed Stone	2248	2243			
Set tree top bridge		1980	1975			
Lime & Injun	Red Clay	1975	1750			
	Cement	1750	1740			
	Crushed Stone	1740	1735			
					1680'	5½"O.D.
Pulled 5½" O.D. Casing						
Pulled 7" O.D. Casing to 1500 ft.						
Salt Sand	Red Clay	1735	1500			
Pulled 7" O. D. Casing to 950 ft.						
	Red Clay	1500	980		1686'	7"O.D.
	Cement	980	970			
~~Pulled~~ Pulled 7" O.D. Casing completely out				DESCRIPTION OF MONUMENT		
~~Set~~ Set tree top	bridge	215	210	18" x 18" x 30" Concrete block		
~~Red Clay~~		210	200	Date: 25 Aug 48		
~~Cement~~		200	190			
~~Red Clay~~		190	0			

and that the work of plugging and filling said well was completed on the 25 day of August, 1948

And further deponents saith not.

Guadalupe Seenz
C. R. De Ley

Sworn to and subscribed before me this 9 day of Sept, 1948.

J. R. Osborne
Notary Public.

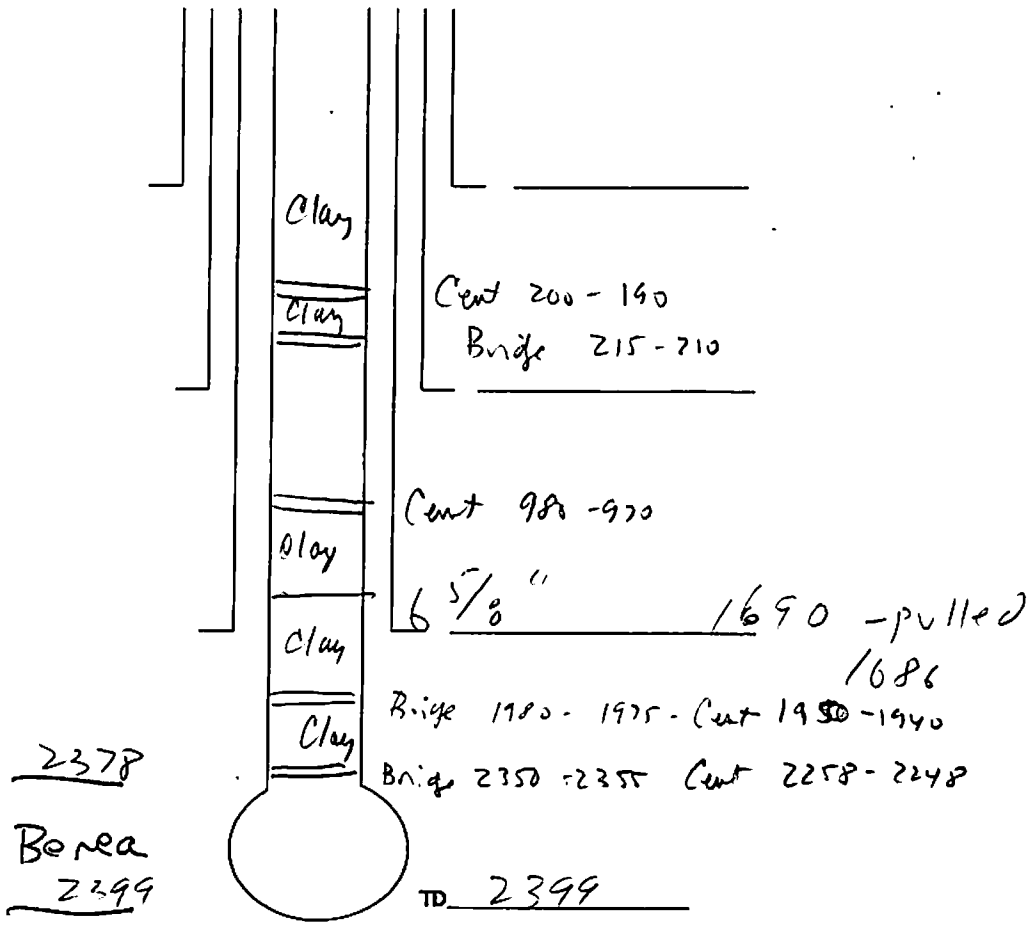
My commission expires:
Oct-9-1957

Permit No.

EP Bell 2

Griffithsville Unit #2 Field

47-043- 30477



From Drillers Records/Plugging Records

pulled 1680' 5 1/2" csng

WVDEP OOG Internal Use Only
Rev. 6/14/16

AOR - Well Review Checklist

API Number: 47- 043 - 31058 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 3
Farm Name: EP Bell
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2,96
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 417,381 Northing: 4,231,031
Elevation: 305
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:
Date Reviewed:

** Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043 - 31058

Record of Well No. 3 on S H Bell Farm ... Acres ... 1

Field ... District ... County ...

Rig Commenced ... 19... Completed ... 19...

Drilling Commenced Nov- 17 1909. Completed ... 19...

Cost per foot 1 1/2 Contractor Hastings & Manuel Oil Co. Address Hastings, W. Va.

Drillers' Names J. N. Cox Jno. Manuel Wm. Hastings

CONDUCTOR AND CASING USED IN DRILLING.

Conductor	13 inch	10 inch	8¼ inch	8 inch	7⅝ inch	6¼ inch	6¼ inch	6¼ inch	6 5-16 inch	4¾ inch
2						1800				

CONDUCTOR AND CASING LEFT IN WELL.

Conductor	13 inch	10 inch	8¼ inch	8 inch	7⅝ inch	6¼ inch	6¼ inch	6¼ inch	6 5-16 inch	4¾ inch
12						1800				

OIL WELL **GAS WELL**

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods		Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure
1/26/10	40 qts	2 mcf	2165	1/25/12	2105 ft.					

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Soil and Clay		12	12	
Sand	12	32	30	
Salt	32	122	90	
Sand	122	192	70	
Salt	192	242	50	
Sand	242	330	88	
Coal	330	335	5	
Salt Sand	335	1065	730	
Salt	1065	1105	40	
Salt Sand	1105	1700	595	
Salt	1700	1710	10	
Red Rock	1710	1720	10	
Lime	1720	1730	20	
Salt	1730	1750	10	
Little Lime	1750	1790	40	
Pencil Cave	1790	1795	5	
Big Lime	1795	1975	180	
" Injun	1975	2045	70	
Slate	2045	2105	60	
Keener Sand	2105	2205	100	
Slate & Shells	2205	2453	248	
Berea Grit	2453	2473	20	
Gas Sand	2473	2494	21	
Slate	2494	2496	2	

FORM OG-6

47-043 - 31058

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

LEASE OR PROPERTY OWNER

ADDRESS

G. S. H. Supply Co.
NAME OF WELL OPERATOR
Griffithsville, W. Va.
COMPLETE ADDRESS
May 12, 1952
WELL AND LOCATION
Duval District
Lincoln County
Well No. 3
S. P. Bellt Farm
Dan E. Larson
STATE INSPECTOR SUPERVISING PLUGGING

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

and

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 G. S. H. Supply Co., well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 16 day of Oct, 19 51, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD	FILLING MATERIAL	PLUGS USED	CASING	
FORMATION		SIZE & KIND	CSG PULLED	CSG LEFT IN
	set par. bridge 2450'	7"	17' 0"	150'
	2 bags cement	5"	1903'	none
	5' crushed stone			
	filled w/ clay 2455' to 2350'			
	neat cement 2350' to 2340'			
	set bridge 2045'			
	2 bags cement			
	5' crushed stone			
	filled w/ clay 2030' to 1630'			
	neat cement 1630' to 1620'			
	crushed stone 5'			
	set bridge 1350'			
	2 bags cement			
	5# crushed stone			
	filled w/ clay 1285' to 1085'			
	neat cement 1085' to 1075'			
	set par. bridge 1050'			
	2 bags cement			
	5' crushed stone			
COAL SEAMS	filled w/ clay 385' to surface	DESCRIPTION OF MONUMENT		
(NAME)		Brestal marker according to rule		
(NAME)		18, 1931 regulations.		
(NAME)				
(NAME)				

MAY 1952
WEST VIRGINIA
DEPARTMENT OF MINES

and that the work of plugging and filling said well was completed on the 21 day of Oct, 19 51

And further deponents saith not.

S. S. Stephens Jr
E. A. Rose

Sworn to and subscribed before me this 14 day of May, 19 52

J. R. Osborne
Notary Public.

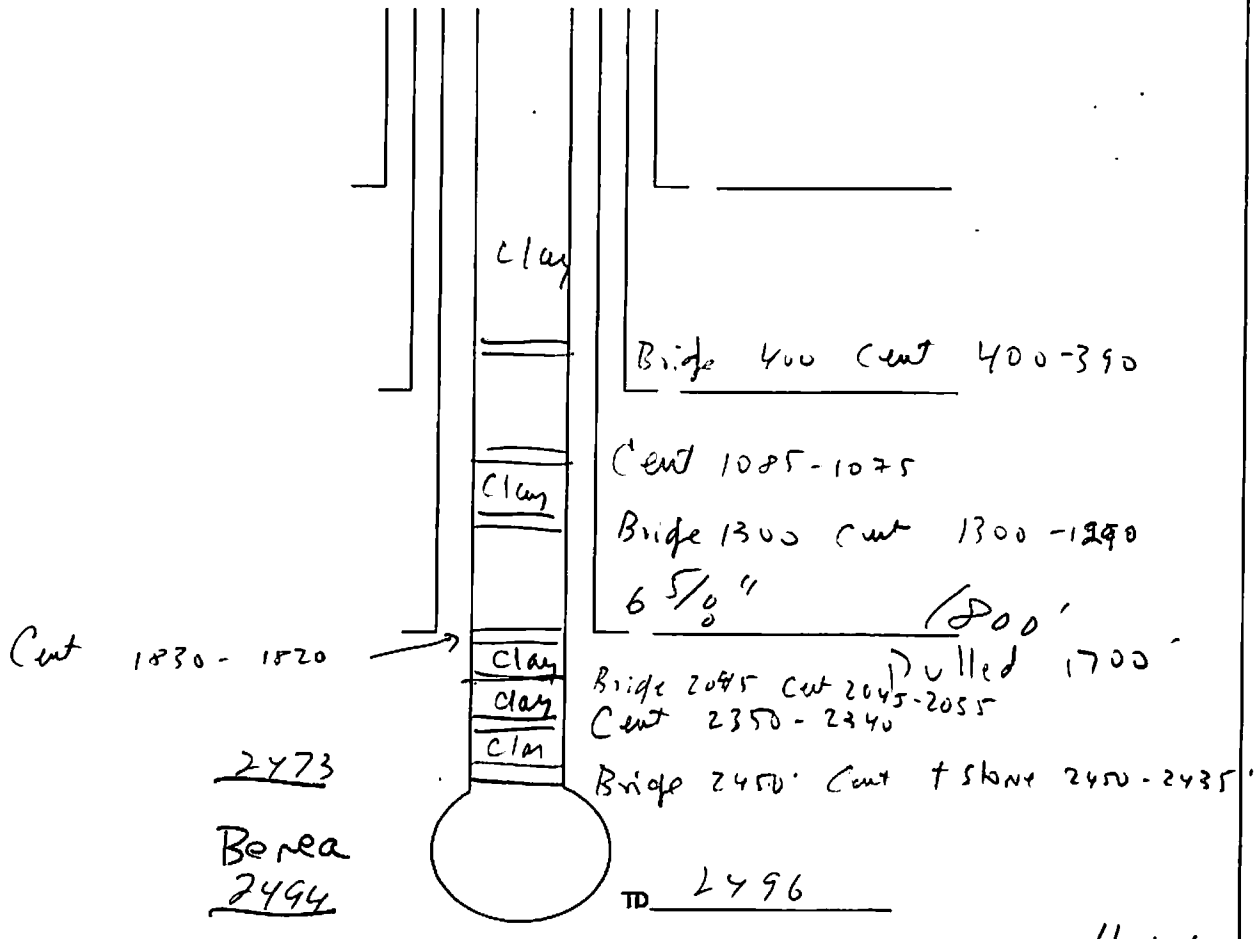
My commission expires:
Oct-9-1957

Permit No. Lin-1058

EP Bell 3

Griffithsville Unit #2 Field

47-043- 3105P



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

(21)

AOR - Well Review Checklist

API Number: 47- 043 - 31059 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 4
Farm Name: E.P. Bell
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 7449
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 416,843 Northing: 4,230,969
Elevation: 290
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = 0
Bottom Hole Injection Pressure 0
Hydrostatic Pressure 0

Comments:

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-3059

RECORD of Well No. 4 on E. P. Bell Farm Acres

Field, District County,

Rig Commenced 19, Completed 19

Drilling Commenced May 11 1910, Completed June 24 1910

Cost per foot, Contractor, Address,

Drillers' Names.

CONDUCTOR AND CASING USED IN DRILLING.

Conductor	13 inch	10 inch	8¼ inch	8 inch	7½ inch	6½ inch	6¼ inch	6⅛ inch	5 3-16 inch	4¾ inch
14						1750				

CONDUCTOR AND CASING LEFT IN WELL.

Conductor	13 inch	10 inch	8¼ inch	8 inch	7½ inch	6½ inch	6¼ inch	6⅛ inch	5 3-16 inch	4¾ inch
14						1750				

OIL WELL **GAS WELL**

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods	Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure
4/25/10	90qts.	2nd	Thick 4½	2½ 3/8					

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Coal Valley		14	14	Fire Clay
Light	14	54	40	
Coal	54	94	40	
Light & Slate	94	344	250	
Sand	344	404	60	
Coal	404	410	6	
Slate	410	450	40	
Sand	450	540	90	Salt water at 520'
Light Sand	540	965	425	2 " " " " 550'
Slate	965	1005	40	
Salt Sand	1005	1645	640	Fine Sand Water at 1125'
Slate	1645	1665	20	
Lime	1665	1685	20	
Slate	1685	1695	10	
Little Lime	1695	1730	35	
Pencil Cave	1730	1740	10	
Big Lime	1740	1930	190	
Big Injun	1930	2000	70	
Slate	2000	2060	60	
Sand	2060	2140	80	
Slate & Shells	2140	2402	262	
Brown Shale	2402	2422	20	
Berea Sand	2422	2446	24	
Slate	2446	2449	3	

47-043 - 31059

FORM OG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

LEASE OR PROPERTY OWNER

ADDRESS

G. S. H. Supply Co.
NAME OF WELL OPERATOR

Griffithsville, W. Va.
COMPLETE ADDRESS

February 9 - 52 19

WELL AND LOCATION

Duval District

Lincoln County

Well. No. 1

E. F. Poll Farm

STATE INSPECTOR SUPERVISING PLUGGING Bone E. Lemon

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

Carter Ruby and J. A. Catron 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 G. S. H. Supply Co., well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 5 day of Sept., 1951, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD	FILLING MATERIAL			PLUGS USED	CASING	
FORMATION	CONTENT	FROM	TO	SIZE & KIND	CSG PULLED	CSG LEFT IN
	Perm. Bridge set	2395		7"	1750'	none
	25sacks cement	2395	2305			
	crushed stone	5'				
	clay/fill	2380	2300			
	Bridge set at	2000'				
	neatcement	2000	1990			
	crushed stone	5'				
	Filled with clay	1985	1779			
	neat cement	1780	1770			
	crushed stone	5'				
	set bridge	1230				
	Neat cement	5'				
	filled with clay	1190	985'			
	neat cement	985'	975'			
	perm. bridge	350'				
	2 bags cement	350'	340'			
	crushed stone	5'				
	Filled with clay	to surface				

COAL SEAMS			
(NAME)			
(NAME)			
(NAME)			
(NAME)			

DESCRIPTION OF MONUMENT
Erected per ..., according to ... 18, ... Regd. D. Mine.

and that the work of plugging and filling said well was completed on the 10 day of Sept., 19 51.

And further deponents saith not.

Carter Ruby
J. A. Catron

Sworn to and subscribed before me this 13 day of Feb., 1952.

J. R. Bobbins
Notary Public.

My commission expires: Oct 9 - 57

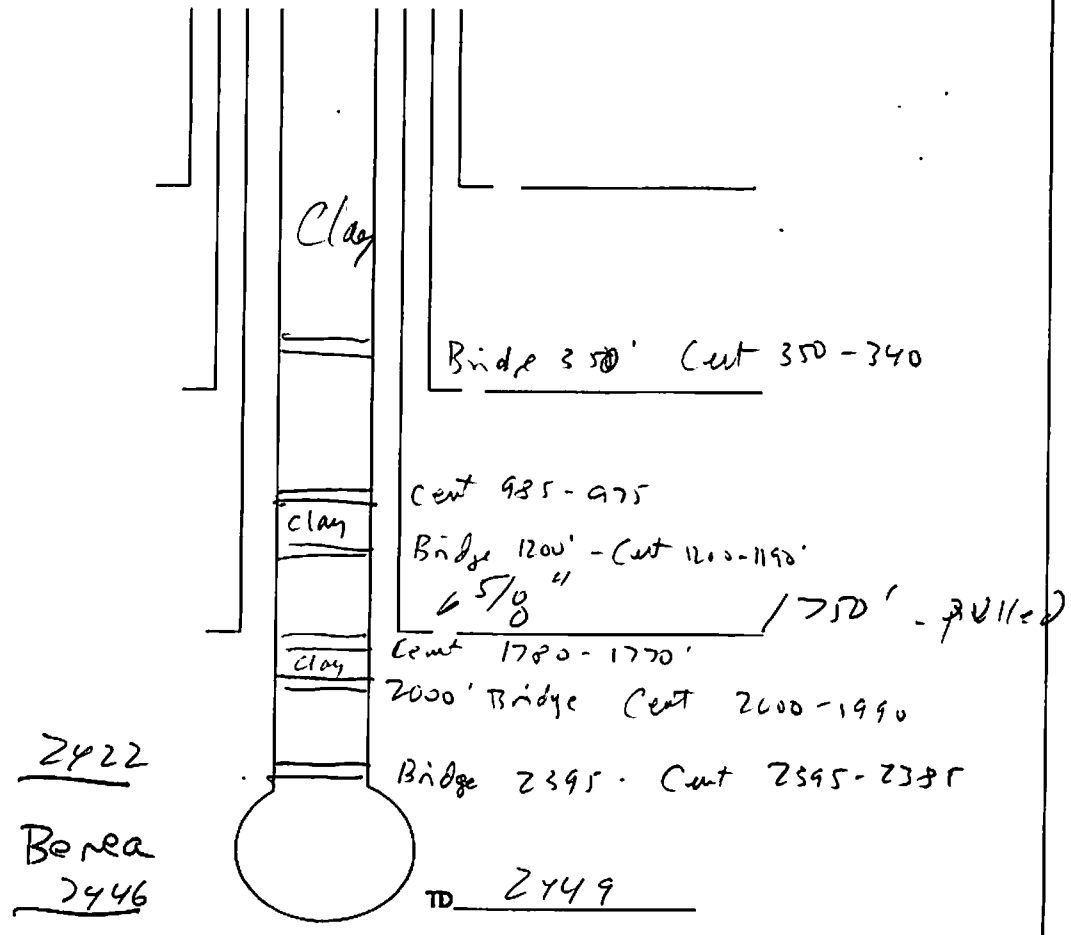
Permit No. Lin. - 1059

FEB 1952
WEST VIRGINIA
DEPARTMENT OF MINES

EP Bell 4

Griffithsville Unit #2 Field

47-043- 31059



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

22

AOR - Well Review Checklist

API Number: 47- 043 - 30476 Area Permit Number: 2R AP

Operator Name: H 6 Energy

Operator's Well #: 5

Farm Name: EP Bell

Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐

Well Status: Active ☐ Abandoned ☐ Plugged ☒

TD of well: 2507

Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐

Easting: 416,976 Northing: 4,231,098 ✓

Elevation: 307

Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**

Bottom Hole Injection Pressure **0**

Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:

Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043 - 30476

RECORD of Well No. 5 on 27 of Ward Farm Acres 1

Field, District County,

ing Commenced 19 Completed 19

lling Commenced Nov - 21 1910 Completed June 9 1911

Cost per foot. 1.15 Contractor, Jno. Ray & Thomas Conde Address, Glen Rose, Texas

Drillers' Names, J. C. Ratcliffe and J. A. Hazelwood

CONDUCTOR AND CASING USED IN DRILLING.

Conductor	13 inch	10 inch	8¼ inch	8 inch	7⅝ inch	6¾ inch	6¼ inch	5⅝ inch	5 3-16 inch	4¾ inch
15'						1810				

CONDUCTOR AND CASING LEFT IN WELL.

Conductor	13 inch	10 inch	8¼ inch	8 inch	7⅝ inch	6¾ inch	6¼ inch	5⅝ inch	5 3-16 inch	4¾ inch
15						1810				

OIL WELL **GAS WELL**

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods	Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure
Wet	Q	2nd Shot 4 Bbls	1400'						

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Soil & Clay		15	15	
Sand &	15	35	20	Fine Lime.
Red Rock	35	95	60	
Sand	95	115	20	
Rock	115	155	40	
Sand	155	185	30	
Rock	185	245	60	
Sand	245	325	80	325' 4 in 10" Hole
Rock	325	425	100	
Sand	425	485	60	
Rock	485	545	60	
Sand	545	635	90	
Rock & Sand	635	1045	410	Hole full of water at 1170
Rock	1045	1085	40	
Rock & Sand	1085	1700	615	
Rock	1700	1720	20	
Red Rock	1720	1730	10	
Lime	1730	1750	20	
Rock	1750	1763	13	
Lime Rock	1763	1796	33	
Sand Cave	1796	1800	4	
Big Lime	1800	1985	185	
" Shale	1985	2040	55	
Shale	2040	2120	80	
Sand	2120	2160	40	
Lime	2160	2280	120	
Shale	2280	2468	188	
Blue Shale	2468	2486	18	
Sand & Shale	2486	2507	21	

47-043-30476

FORM OG-6

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE. ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

South Penn Natural Gas Co.
LEASE OR PROPERTY OWNER

Parkersburg, W. Va.
ADDRESS

C. R. De Lay
NAME OF WELL OPERATOR

P. O. Box 49 Hamlin, W. Va.
COMPLETE ADDRESS

25 August 1948
WELL AND LOCATION

Duval District

Lincoln County

Well No. five (5)

E. P. Bell Farm

STATE INSPECTOR SUPERVISING PLUGGING D. E. Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

C. R. De Lay and Guadalupe Saenz 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 C. R. De Lay well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 17 day of August, 1948, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD — FORMATION	FILLING MATERIAL — CONTENT	FROM	TO	PLUGS USED — SIZE & KIND	CASING — CSG PULLED	CSG LEFT IN
Pulled tubing in two at packer which was set at 1840 ft. filled to 1830 ft. with red clay and set cement plug to 1820, sealing Berea, Big Lime & Injun						
Pulled 7" casing to 1500 ft.						
Salt Sand	crushed stone	1820	1815			
	red clay	1815	1500			
Pulled 7" casing to 1000 ft.						
	red clay	1500	1065			
	cement	1065	1055			
Pulled 7" casing completely out						
Tree top bridge at 210 ft.						
	red clay	205	195			
	cement	195	185			
	red clay	185	0		1812'	7"O.D.

COAL SEAMS
(NAME)
(NAME)
(NAME)
(NAME)

DESCRIPTION OF MONUMENT
18" x 18" x 30" concrete block
Date: 20 August '48

and that the work of plugging and filling said well was completed on the 20 day of August, 1948.

And further deponents saith not.

Guadalupe Saenz
C. R. De Lay

Sworn to and subscribed before me this 9 day of Sept, 1948.

J. R. Robinson
Notary Public.

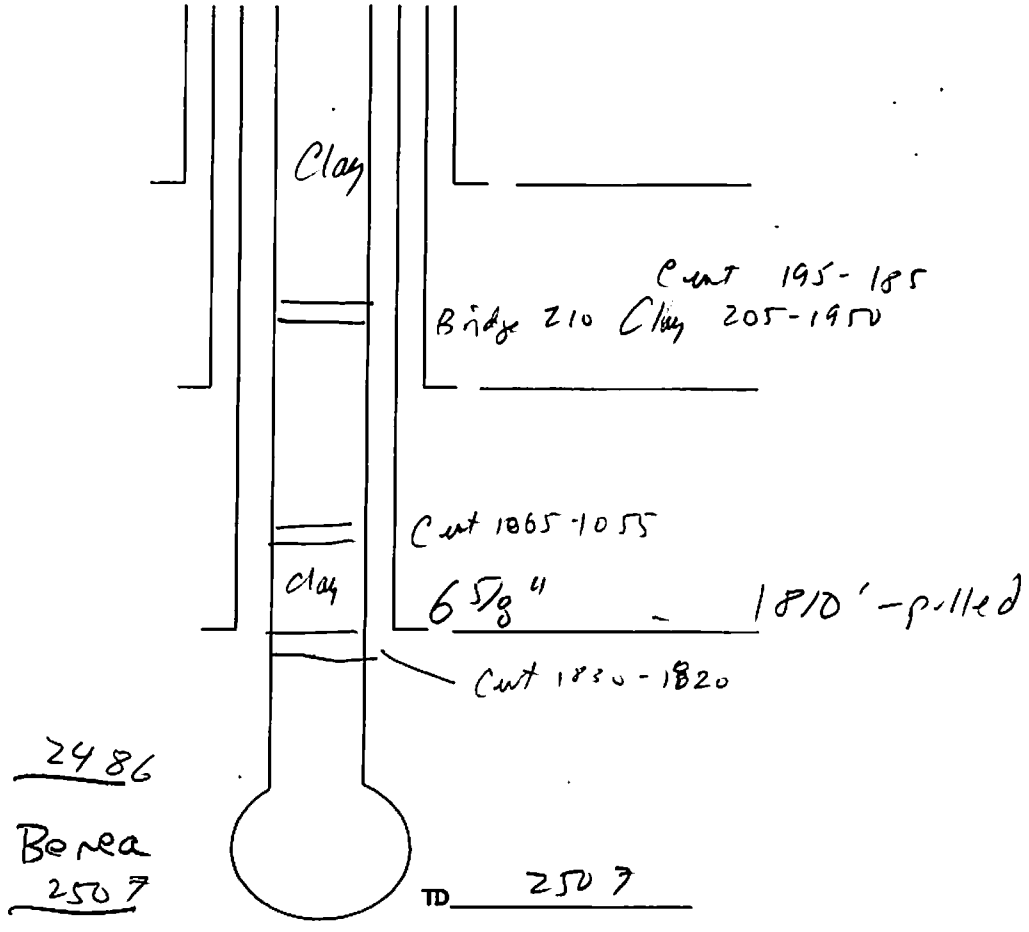
My commission expires:
Oct-9-1957

Permit No.

EP Bell 5

Griffithsville Unit #2 Field

47-043- 30476



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

(23)

AOR - Well Review Checklist

API Number: 47- 043 - 31060 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 6
Farm Name: EP Bell
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2455
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 417,140 Northing: 4,231,130
Elevation: 794
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = 0
Bottom Hole Injection Pressure 0
Hydrostatic Pressure 0

Comments:

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-3100

Record of Well No. 6 on C. E. Wells Farm ... Acres ...

... Field, ... District ... County, ...

... Commenced ... 19... Completed ... 19...

Drilling Commenced April 15 1911 Completed May 31 1911

Cost per foot, 1.15 Contractor, Hawley & Thomas Oil Co. Address, Hawley W. Va.

Drillers' Names, W. E. Dillon, Geo. H. Hill, C. Lee

CONDUCTOR AND CASING USED IN DRILLING.

Conductor	13 inch	10 inch	8¼ inch	8 inch	7¼ inch	6¼ inch	6¼ inch	5¼ inch	5 3/16 inch	4¼ inch
16						1765'				

CONDUCTOR AND CASING LEFT IN WELL.

Conductor	13 inch	10 inch	8¼ inch	8 inch	7¼ inch	6¼ inch	6¼ inch	5¼ inch	5 3/16 inch	4¼ inch
16						1765'				

OIL WELL — GAS WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods	Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure
6/11	90 qts.	2m. 4 Bbl.	1 1/2	5/8 12 200 qts.					

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Soil & Clay		16	16	
Slate	16	56	40	
Sand	56	116	60	
Slate	116	166	50	
Sand	166	246	80	
Slate	246	336	90	
Sand	336	350	14	
Coal	350	353	3	
Slate	353	463	110	
Sand	463	503	40	
Slate	503	530	27	
Coal	530	533	3	
Slate & Sand	533	960	427	
Slate	960	1000	40	
Salt Sand	1000	1640	640	Gas at 1100'
Slate	1640	1660	20	
Red Rock	1660	1670	10	Hole full of water at 1165'
Slate	1670	1690	20	
Lime	1690	1710	20	
Slate	1710	1720	10	
Little Lime	1720	1730	30	
Pencil Cave	1730	1732	2	
Big Lime	1732	1932	180	
Big Injun	1932	1987	55	
Slate	1987	2047	60	
Squaw	2047	2137	90	
Slate & Shells	2137	2217	80	
Slate	2217	2418	201	
Brown Shale	2418	2438	20	
Berea Sand	2438	2459	21	

47-043-3106 0

FORM OG-3

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER — ADDRESS

COAL OPERATOR OR OWNER — ADDRESS

LEASE OR PROPERTY OWNER — ADDRESS

NAME OF WELL OPERATOR: C. S. H. Supply Co.
COMPLETE ADDRESS: c/o Ed Record Griffithsville W. Va.
Sept 12, 19 51.
WELL AND LOCATION: Duval District
Lincoln County
Well No. 6
E. P. Bell Farm

STATE INSPECTOR SUPERVISING PLUGGING: Dana E. Emson

AFFIDAVIT

STATE OF WEST VIRGINIA, County of Lincoln } ss:

Carter Ruby and Bill McCormick 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 C. S. H. Supply Co., well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 28 day of August, 19 51, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD	FILLING MATERIAL			PLUGS USED	CASING	
FORMATION	CONTENT	FROM	TO	SIZE & KIND	CSG PULLED	CSG LEFT IN
	Set bridge	2393'		7"	1765'	none
	2 bags cement	2393'	2383'	2"	2159'	none
	Crushed stone	5'				
	Filled w/ clay	2383'	2300			
	Neat cement	2300'	2290'			
	Set bridge	1985'				
	Neat cement	1985'	1975			
	Crushed stone	5'				
	Filled with clay	1975'	1795'			
	Neat cement	1795'	1785'			
	Crushed stone	5'				
	Set bridge	1200'				
	Neat cement	1200'	1190			
	Crushed stone	5'				
	Filled w/ Clay	1190'	980'			
COAL SEAMS	Neat cement	980'	170'	DESCRIPTION OF MONUMENT		
(NAME)	Set bridge	350'		Erected marker according to		
(NAME)	neat cement	350'	340'	rule 16, 1931 regulations.		
(NAME)	Crushed stone	5'				
(NAME)	Filled with clay to surface					

And that the work of plugging and filling said well was completed on the 3 day of Sept., 19 51

And further deponents saith not.

Carter Ruby
Bill McCormick

Sworn to and subscribed before me this 4 day of Dec., 1951

J R Osborne
Notary Public.

My commission expires: 9-

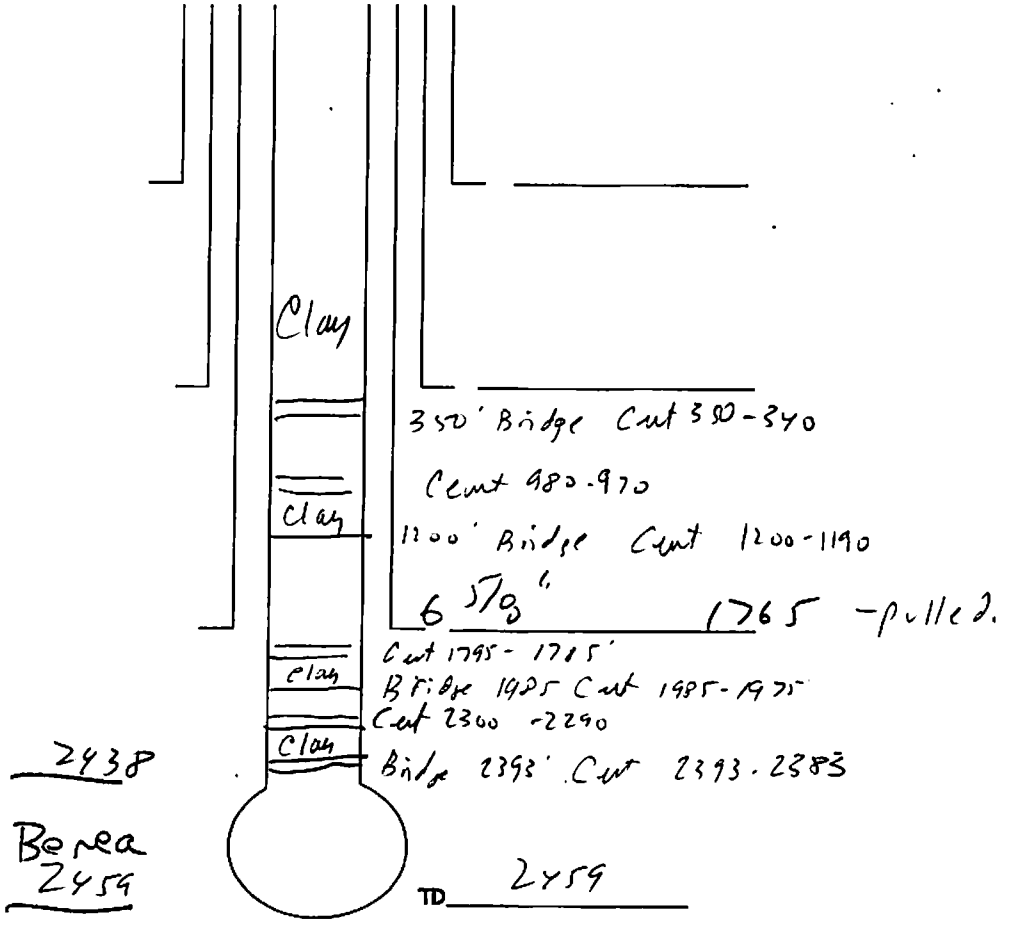
Permit No. LIN-1060

DEC 1951 WEST VIRGINIA DEPARTMENT OF MINES

EP Bell 6

Griffithsville Unit #2 Field

47-043-31060



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

(24)

AOR - Well Review Checklist

API Number: 47-043 - 31058 Area Permit Number: 2R AP
Operator Name: H6 Energy
Operator's Well #: 7
Farm Name: EP Bell
Field Name: Gnatzville Unit 2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☐ Producer (NonWaterflood) ☒ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2496
Completion Zones: _____ Perforated Interval: _____

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 417,381 Northing: 4,231,031
Elevation: 305
Inside Field Boundary? ☐ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐	
Date of Last MIT: _____	Passed?	No ☐	Yes ☐	
Open Hole Completion		No ☐	Yes ☒	
Well penetrates injection zone?		No ☐	Yes ☒	
Well perforated in injection zone?		No ☒	Yes ☐	
Cemented across injection zone?		No ☒	Yes ☐	
Packer immediately above injection zone (<100')?		No ☐	Yes ☐	No Packer ☐
		If No: Provide Depth: _____		
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☐	

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Reviewer Name: _____ Signature: _____
Date Reviewed: _____

** Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

of Well No. 3 on E P Bell Farm Acres

Field, District County,

Commenced 19 , Completed 19

Drilling Commenced Nov 17 1909, Completed 19

Cost per foot, 1.15 Contractor, Yawkey & Inman Drl Co. Address, Yawkey, W. Va.

Drillers' Names, J. N. VanCleeder and Jas Mayberry.

CONDUCTOR AND CASING USED IN DRILLING.

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅛ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 9-10 Inch	4⅜ Inch
2						1800				

CONDUCTOR AND CASING LEFT IN WELL.

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅛ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 9-10 Inch	4⅜ Inch
12						1800				

OIL WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods		Size of Packer	Depth Set
1/26/10	90 qt.	2 mcf.	Shot	1/2 3/4	2109 ft.		

GAS WELL

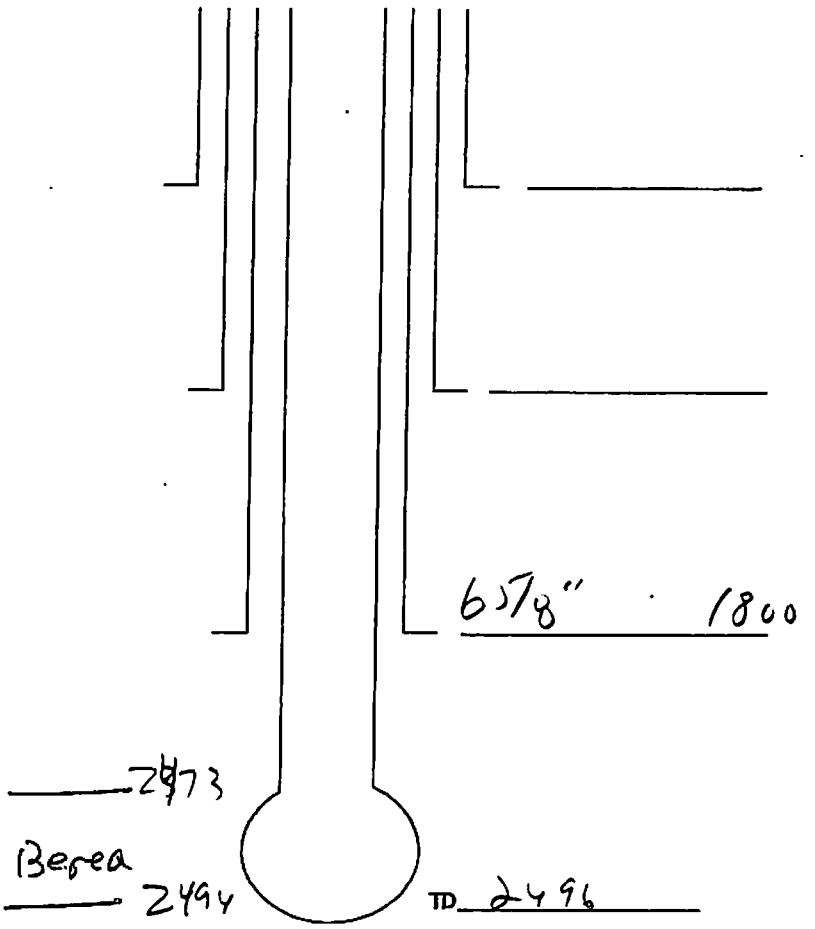
Tubing	1st Minute Pressure	Rock Pressure

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Soil and Clay		12	12	El- 1000.85
Sand	12	32	30	
Slate	32	122	90	
Sand	122	192	70	
Slate	192	242	50	
Sand	242	330	88	
Coal	330	335	5	
Slate & Sand	335	1065	730	
Slate	1065	1105	40	
Salt Sand	1105	1700	595	
Slate	1700	1710	10	
Red Rock	1710	1720	10	
Lime	1720	1740	20	
Slate	1740	1750	10	
Little Lime	1750	1790	40	
Pencil Cave	1790	1795	5	
Big Lime	1795	1975	180	
" Injun	1975	2045	70	
Slate	2045	2105	60	
Lime Shells	2105	2205	100	
Slate & Shells	2205	2453	248	
Brim Lime	2453	2473	20	
Berea Sand	2473	2494	21	
Slate	2494	2496	2	

EP Bell 3

Griffithsville Unit #2 Field

47-043- 31058



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

(75)

AOR - Well Review Checklist

API Number: 47- 043 - 31061 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 8
Farm Name: EP Bell
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2512
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 417,381 Northing: 4,231,421
Elevation: 309
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = 0
Bottom Hole Injection Pressure 0
Hydrostatic Pressure 0

Comments:

Reviewer Name: Signature:
Date Reviewed:

** Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-31061

RECORD of Well No. 8 on E P Bell Farm Acres

Field, District County,

Rig Commenced 19 Completed 19

Drilling Commenced Aug 22 1911. Completed Oct 7 1911

Cost per foot, 1.15 Contractor, Yawkey & Fitzsimmons Bro Address, Yawkey W. Va.

Drillers' Names, H.W. Gist & W.E. Fitzsimmons

CONDUCTOR AND CASING USED IN DRILLING.

Conductor	13 inch	10 inch	8¼ inch	6 inch	7⅝ inch	6⅝ inch	6¼ inch	5⅝ inch	5 3/16 inch	4¼ inch
16				395'		1815'				

CONDUCTOR AND CASING LEFT IN WELL.

Conductor	13 inch	10 inch	8¼ inch	6 inch	7⅝ inch	6⅝ inch	6¼ inch	5⅝ inch	5 3/16 inch	4¼ inch
16						1815'				

OIL WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods
10/21/11	90 qts	2nd Shot 2 qts	2 qts	90 qts

GAS WELL

Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Soil & Clay		16	16	Casing 13' in Big Lime
Slate	16	36	20	
Red Rock	36	81	45	
Sand	81	111	30	
Slate & Shells	111	261	150	
Sand	261	301	40	
Slate	301	351	50	
Sand	351	381	30	
Slate	381	501	120	
Sand	501	580	79	
Coal	580	586	6	
Slate & Sand	586	1075	489	Hole full of water at 1180'.
Slate & Sand	1075'	1700	625	
Slate	1700	1720	20	
Red Rock	1720	1730	10	
Slate	1730	1770	40	
Little Lime	1770	1800	30	
Pencil Cave	1800	1802	2	
Big Lime	1802	1992	190	
Big Injun	1992	2052	60	
Slate	2052	2122	70	
Squaw	2122	2182	60	
Slate & Shells	2182	2282	100	
Slate	2282	2471	189	
Brown Shale	2471	2491	20	
Berea Sand	2491	2512	21	

FORM OG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

47-043-3106 I

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

LEASE OR PROPERTY OWNER

ADDRESS

G. S. H. Supply Co.
NAME OF WELL OPERATOR
Griffithsville, W. Va.
COMPLETE ADDRESS
Jan. 21, 1952 19
WELL AND LOCATION
Duval District
Lincoln County
Well No. 8
E. P Bell Farm

STATE INSPECTOR SUPERVISING PLUGGING Dane E. Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

Carter Ruby and J. A. Catron 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 , well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 21 day of Aug. 51, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD	FILLING MATERIAL			PLUGS USED	CASING	
FORMATION	CONTENT	FROM	TO	SIZE & KIND	CSG PULLED	CSG LEFT IN
	Set bridge at	2486'				
	2 sacks cement	2486'	2476	5"	1852'	no
	crushed stone	5'				
	clay to	2471	2386'	7"	460'	1355
	neat cement	2386	2376			
	Set a per. bridge	2050'				
	2 sacks cement	2050	2040			
	crushed stone	5'				
	fill/clay to		1845'			
	neat cement	1845	1835			
	crushed stone	5'				
	Bridge hole at	1275				
	2 sacks cement	1275	1265			
	crushed stone	5'				
	Fill/w clay	1260	1055			
	cement	1055	1045			
	Set Per. Bridge	400'				
	neat cement	400	390			
	crushed stone	5'				
	fill/w Clay to surface					

COAL SEAMS
(NAME)
(NAME)
(NAME)
(NAME)

DESCRIPTION OF MONUMENT
Erected marker as describe in rule 19, 1931 Reg.

and that the work of plugging and filling said well was completed on the 22 day of Aug. 51.

And further deponents saith not.

Carter Ruby
J. A. Catron

Sworn to and subscribed before me this day of Feb., 1952

J. C. Osborne
Notary Public.

My commission expires:

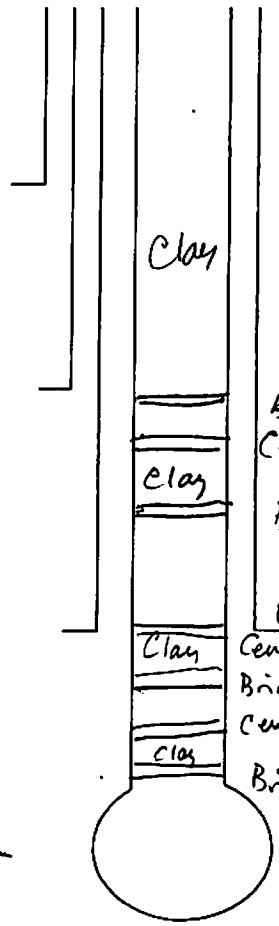
FEB 1952
WEST VIRGINIA
DEPARTMENT OF MINES

Permit No. Lin 1061

EP Roll 8

Griffithsville Unit #2 Field

47-043- 31061



8" 395 - pulled

Bridge 400' Cemt 400-390

Cemt 1055-1045

Bridge 1276 Cemt 1275-1265

6 5/8" - 1815

Cemt 1815-1635

Bridge 2050' Cemt 2050-2040 - pulled 460'

Cemt 2386-2376

Bridge 2486 Cemt 2486-2476

2491

Berea 2512

TD 2512

5" casing

pulled 1852

From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

26

AOR - Well Review Checklist

API Number: 47- 043 - Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 9
Farm Name: EP Bell
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2598
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 417,714 Northing: 4,231,383
Elevation: 338
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☐

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

need WR 38 + AHF
NA

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

RECORD of Well No. 9 on E. P. Weil Farm Acres

Field, District County

Commenced 19 Completed 19

Drilling Commenced Oct 18 1911 Completed Dec 2 1911

Cost per foot, 1.15 Contractor, Yantey & Inman Drlg Co Address, Eldorado Kans.

Drillers' Names Elmer Cisel & Lee Inman

CONDUCTOR AND CASING USED IN DRILLING

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅝ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 3-16-Inch	4½ Inch
16						1912				

CONDUCTOR AND CASING LEFT IN WELL

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7¾ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 3-16 Inch	4½ Inch
16						1912	(Pulled when Abandoned)			

OIL WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods
12/4/11	80 qts.			

GAS WELL

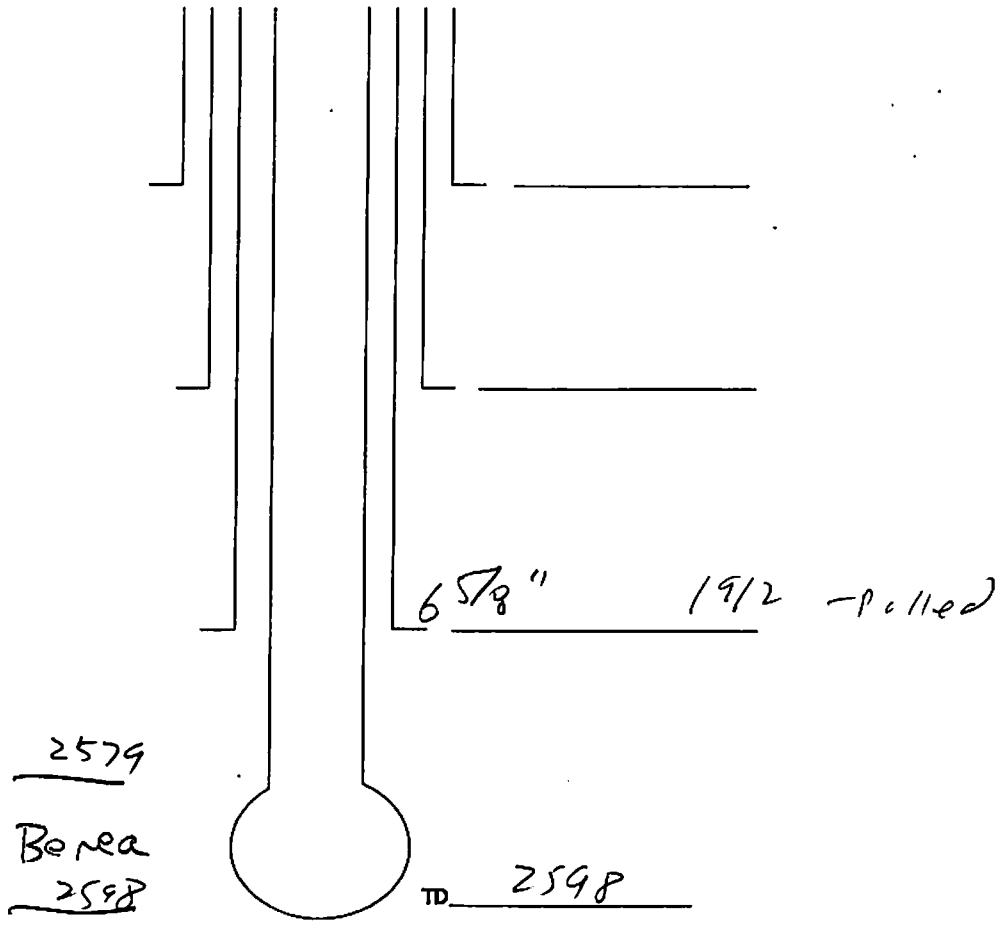
Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Soil & Clay		16	16	Cased 12" in Big Lime
Slate	16	90	74	
Lime	90	240	150	
Slate	240	310	70	
Lime	310	313	3	
Sand	313	385	72	
Slate	385	410	25	4 Barrel water at 420'
Lime	410	480	70	
Red Rock	480	505	25	
Lime	505	510	5	610' of 10" hole
Lime	510	610	100	
Slate	610	645	35	
Lime	645	650	5	
Lime & Slate	650	1080	430	
Salt Sand	1080	1820	740	Hole full of water at 1260'
Slate	1820	1825	5	
Red Rock	1825	1835	10	
Lime	1835	1852	17	
Slate	1852	1860	8	
Little Lime	1860	1897	37	
Pencil Cave	1897	1900	3	
Big Lime	1900	2085	185	Gas in Big Lime at 2040
Big Injun	2085	2155	70	
Lime	2155	2225	70	
Injun	2225	2315	90	
Slate	2315	2534	244	"Abandoned"
Brown Shale	2534	2579	20	Mar. 20, 1926
Berea Sand	2579	2598	19	

EP Bell

Griffithsville Unit #2 Field

47-043- _____



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

(27)

AOR - Well Review Checklist

API Number: 47- 043 - 31062 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 10
Farm Name: EP Bell
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2512
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 417,526 Northing: 4,231,202
Elevation: 313
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = 0
Bottom Hole Injection Pressure 0
Hydrostatic Pressure 0

Comments:

Reviewer Name: Signature:
Date Reviewed:

** Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

Cost per foot, 1 1/2 Contractor, Gunning & Hissman and Address, Gunning, Ames

Drillers' Names P. J. Smith & N. C. Stevens

CONDUCTOR AND CASING USED IN DRILLING

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅝ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 3-16-Inch	4½ Inch
16						1810				

CONDUCTOR AND CASING LEFT IN WELL

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅝ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 3-16 Inch	4½ Inch
16						1810				

OIL WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods
4/22/12	80 qt.	2nd Shot 5/24/13		120 qt.

GAS WELL

Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Surface Clay		16	16	Cased 15½" Big Lime
Slate & Sand	16	400	384	El= ~~1067.68 ground~~
Coal	400	404	4	" 1024.82
Slate	404	414	10	
Sand	414	500	86	
Slate	500	530	30	410' of 10" hole
Sand	530	565	35	
Coal	565	570	5	
Sand	570	645	75	47-043-31062
Slate	645	725	80	
Sand	725	800	75	
Slate	800	830	30	
Sand	830	870	40	
Slate	870	920	50	
Sand	920	980	60	Hole full of water at 1180'
Coal	980	983	3	
Sand	983	1013	30	
Slate	1013	1043	30	
Slate & Lime	1043	1145	102	
Salt Sand	1145	1745	600	
Slate	1745	1755	10	
Little Lime	1755	1792	37	
Pencil Cave	1792	1795	3	
Big Lime	1795	1980	185	
Big Lime	1980	2050	70	
Slate	2050	2130	80	
Lime Shells	2130	2215	85	
Slate & Shells	2215	2470	255	
Brown Shale	2470	2492	22	
Berea Sand	2492	2512	20	

47-043-31062

FORM 06-B

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER — NAME OF WELL OPERATOR: G. S. H. Supply Co.

ADDRESS — COMPLETE ADDRESS: Gulf Liberal, W. Va.

COAL OPERATOR OR OWNER — WELL AND LOCATION: May 12, 19 52

ADDRESS — District: Duval

LEASE OR PROPERTY OWNER — County: Lincoln

ADDRESS — Well No. 10

E. P. Ball — Farm

STATE INSPECTOR SUPERVISING PLUGGING: Jno. E. Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA, County of Lincoln } ss:

and

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 G. S. H. Supply Co., well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 6 day of Oct., 19 51, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD	FILLING MATERIAL	PLUGS USED	CASING	
FORMATION		SIZE & KIND	CSG PULLED	CSG LEFT IN
	set bridge 2407'			
	2 bags neat cmt	7"	2553'	none
	5' crushed stone	5"	none	none
	filled w/ clay (2453') to 2360 (2453')			
	neat cement 2350' to 2350'			
	set bridge 2050'			
	2 bags cement			
	5' crushed stone			
	filled w/ clay 2050' to 1940'			
	neat cement 1840' to 1830'			
	5' crushed stone			
	set bridge 1350'			
	2 bags cement			
	crushed stone 5'			
	filled w/ clay 1350' to 1125'			
	neat cement 1125' to 1115'			
	set bridge 400'			
	2 bags cement			
COAL SEAMS	5' crushed stone	DESCRIPTION OF MONUMENT		
(NAME)	filled w/ clay 385' to surface	Erected monument as required		
(NAME)		in Rule 15, 1951 Regulations.		
(NAME)				
(NAME)				

RECEIVED MAY 19 1952 WEST VIRGINIA DEPARTMENT OF MINES

and that the work of plugging and filling said well was completed on the 15 day of Oct., 19 51.

And further deponents saith not.

S. S. Stephens Jr.
E. P. Ball

Sworn to and subscribed before me this 14 day of May, 1952.

J. R. Osborne
Notary Public.

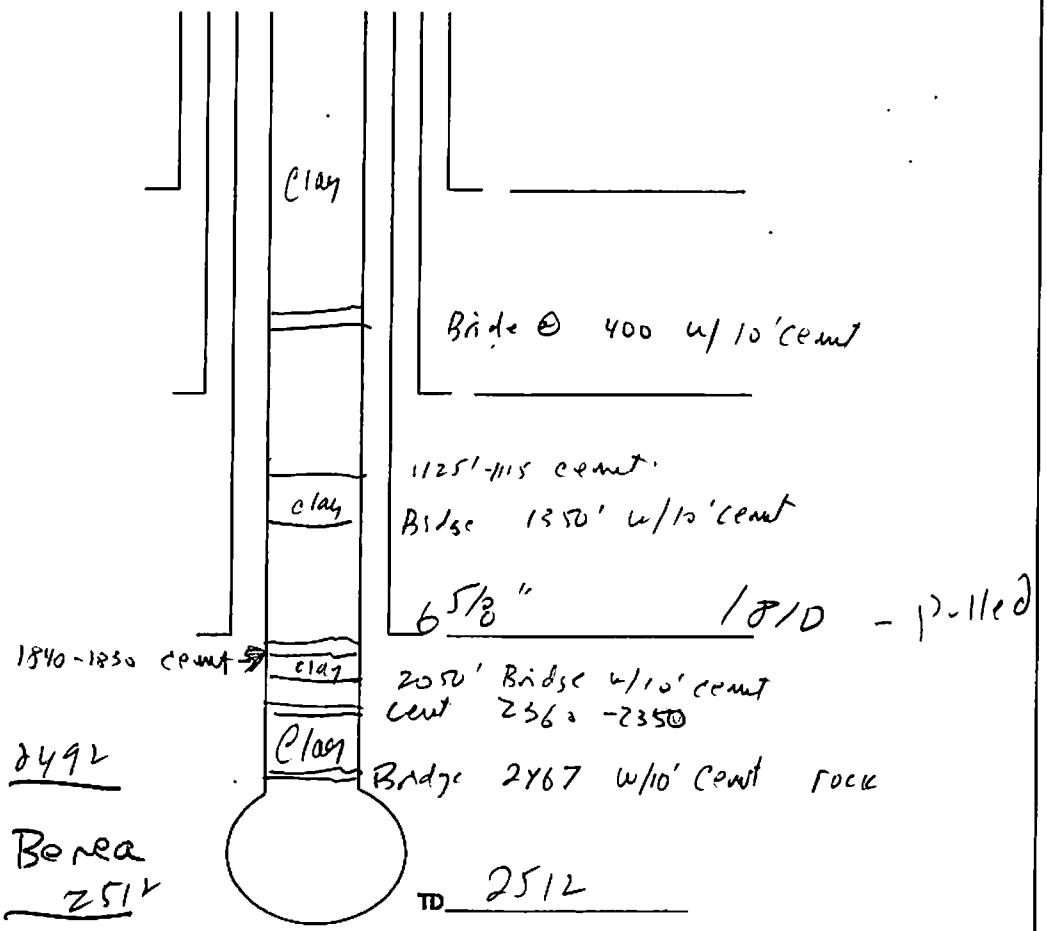
My commission expires: Oct-7-1957

Permit No. Lin-1052

EP Bell 10

Griffithsville Unit #2 Field

47-043- 31062



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

-20

AOR - Well Review Checklist

API Number: 47- 043 - 30269 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 11
Farm Name: EP Bell
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2617
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 417,662 Northing: 4,231,662
Elevation: 344
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:
Date Reviewed:

** Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

Drillers' Names N. W. Cordel & W. F. Harris

CONDUCTOR AND CASING USED IN DRILLING

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅝ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 3-16-Inch	4⅛ Inch
16						1930				

CONDUCTOR AND CASING LEFT IN WELL

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅝ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 3-16 Inch	4⅛ Inch
16						1790 Left in 140 Pulled 1930				

OIL WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods	
4/17/42	80 qts.	2nd Shot	7/3/42	1530 ft	

GAS WELL

Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Conductor		16	16	Cased 20' in Big Lime
Red Rock	16	45	29	El - 1130.24
Sand	45	75	30	
Red Rock	75	165	90	
Sand	165	230	65	
Red Rock	230	275	45	
Sand	275	350	75	540' of 10" hole
Shale	350	440	90	
Lime	440	480	40	
Sand	480	535	55	
Coal (?)	535	538	3	
Sand	538	680	142	
Shale	680	700	20	"Abandoned"
Coal (?)	700	704	4	March 26, 1942
Shale	704	775	71	
Sand	775	840	65	
Shale	840	920	80	
Sand	920	1016	96	
Shale	1016	1095	79	Gas at 1255'
Sand	1095	1165	70	
Shale	1165	1185	20	Hole full of Water at 1295
Salt Sand	1185	1865	680	
Shale	1865	1875	10	
Little Lime	1875	1900	25	
Pencil Cave	1900	1910	10	
Big Lime	1910	2100	190	
Big Lime	2100	2155	55	
Salt & Shells	2155	2320	165	
Shale	2320	2573	253	
Simm. Shale	2573	2597	24	
Berea Sand	2597	2617	20	

47-043-30269

47-043-30269

FORM OG-3

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE. ONE COPY MAILED TO THE DEPARTMENT, 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.

(NO COAL)
COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

Ephraim Griffith
LEASE OR PROPERTY OWNER

Yawkey, West Va.
ADDRESS

SOUTH PENN NATURAL GAS COMPANY.
NAME OF WELL OPERATOR
Union Trust Building,
Parkersburg, W. Va.
COMPLETE ADDRESS

May 4, 1942
WELL AND LOCATION

Duval District

Lincoln County

Well No. 11

E. P. Bell Farm

STATE INSPECTOR SUPERVISING PLUGGING Calvin Hall

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

G. W. Richards and Everett Richards 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 South Penn Natural Gas Co., well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 16th day of March, 1942, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD		FILLING MATERIAL		PLUGS USED	CASING	
FORMATION	CONTENT	FROM	TO	SIZE & KIND	CSG PULLED	CSG LEFT IN
Berea	Clay	2617	2577			
	Cement	2577	2567			
Permanent Bridge		2185				
B. Inj. B.Lime	Clay	2185	1930	6-5/8"- 140' - 1790'		
B. Lime	Clay	1930	1890			
	Cement	1890	1880			
L. Lime	Clay	1880	1855			
	Cement	1855	1845			
Salt Sand	Clay	1845	1165			
	Cement	1165	1155			
	Clay	1155	to surface.			
COAL SEAMS				DESCRIPTION OF MONUMENT		
(NAME)				8-1/4" csg.ext. 3' above surface,		
(NAME)				filled with concrete. Inscribed on		
(NAME)				top -S.P.N.G.Co.-E.P.Bell #11.		
(NAME)				Abd. Mar. 26-1942		

and that the work of plugging and filling said well was completed on the 26th day of March, 1942.

And further deponents saith not.

G. W. Richards (X)
Everett Richards

Sworn to and subscribed before me this 14 day of May, 1942.

J. L. Smith
Notary Public.

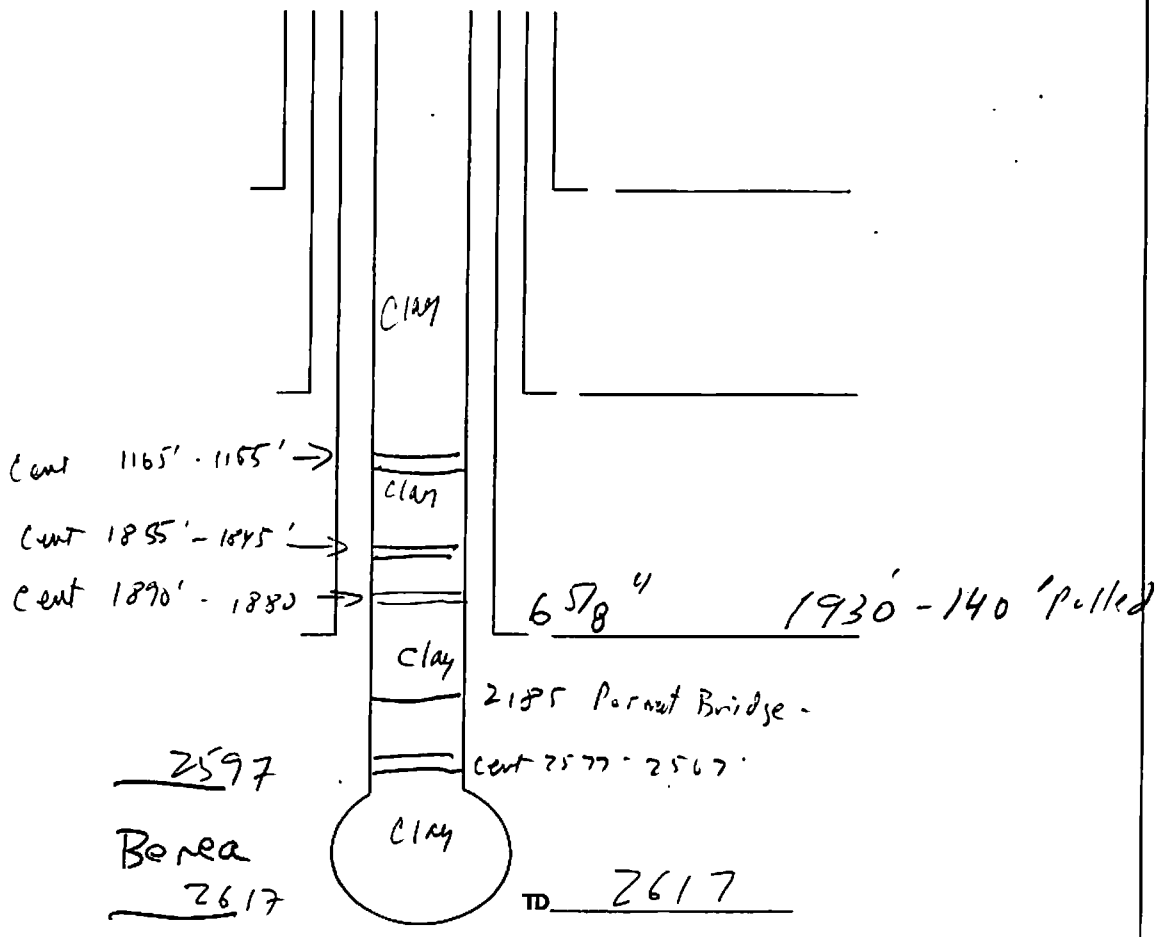
My commission expires:
Dec. 7- 1947

Permit No. LII-269

EP Roll 11

Griffithsville Unit #2 Field

47-043- 30265



From Drillers Records/Plugging Records

(29)

WVDEP OOG Internal Use Only
Rev. 6/14/16

AOR - Well Review Checklist

API Number: 47- 043 - 02210 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 12
Farm Name: EP Bell
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2447
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 417,478 Northing: 4,231,593
Elevation: 288
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-02210

Well No. 12 on E.P. Rice Farm Acres
Field, District County 43.02210D
Commenced 19
Drilling Commenced April 3 1913, Completed May 24 1913
Cost per foot, 1.16 Contractor, Yawkey & Brennan Dut. Address, Yawkey, W.Va.
Drillers' Names E.G. Hall & W.E. Williamson

CONDUCTOR AND CASING USED IN DRILLING

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅝ Inch	6⅝ Inch	6¼ Inch	5⅜ Inch	5 3-16-Inch	4½ Inch
10				370		1750		1129'6"		

CONDUCTOR AND CASING LEFT IN WELL

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅝ Inch	6⅝ Inch	6¼ Inch	5⅜ Inch	5 3-16 Inch	4½ Inch
10						1750		1129'6"		

OIL WELL — GAS WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods		Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure
5/26/13	80 qts	2nd Sheet 11/26/13	120 qts.							

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Conductor		10	10	El = 951.7
Slate	10	50	40	
Sand	50	110	60	
Slate	110	200	90	
Sand	200	295	95	
Coal	295	300	5	
Sand	300	360	60	
Coal & Slate	360	365	5	
Sand	365	400	35	
Slate	400	450	50	
Sand	450	490	40	
Sand & Slate	490	1000	510	
Lime	1000	1015	15	
Slate	1015	1030	15	Hole full of Water at 1100'
Salt Sand	1030	1670	640	
Slate	1670	1700	30	
Little Lime	1700	1735	35	
Pencil Cave	1735	1740	5	
Big Lime	1740	1920	180	
Big Injun	1920	1990	70	
Slate	1990	2080	90	
Sand - Pieces	2080	2220	140	
Slate	2220	2400	180	
Brown Shale	2400	2420	20	
Berea Sand	2420	2441	21	

-38 API # 47-043-02210

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY
DIVISION 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: McMellon, Rex G. Operator Well No.: E.P. Ball #12

LOCATION: Elevation: 950' Quadrangle: Griffithsville 7.5'
District: Duval County: Lincoln
Latitude: 7850' South of 38 Deg. 15Min. 00 Sec.
Longitude 7575' West of 81 Deg. 55Min. 00 Sec.

Well Type: OIL X GAS _____

Company: East Resources Inc.
P.O. Box 5519
Vienna, WV 26105

Coal Operator or Owner NA

Agent: Michael McCown
Inspector: Ralph Triplett
Permit Issued: 6/23/03

Coal Operator or Owner NA

RECEIVED
Office of Oil & Gas
Permitting
SEP 05 2003
WV Department of
Environmental Protection

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Wood ss:

Bill Wade and Jason Meadows 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 East Resources Inc., well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 21st day of July, 2003, and that the well was plugged and filled in the following manner:

TYPE	FROM	TO	PIPE	REMOVED	LEFT
Cement	2130'	1980'	5 1/2"	1900'	0'
Cement	1800'	1700'	7"	106'	1644'
Cement	1150'	1050'			
Cement	850'	750'			
Cement	650'	550'			
Cement	450'	250'	Shot 7"		
Cement	106'	0			
6% Gel Between Cement Plugs		1103,805,606,	376,310,106		

Description of monument: 7" X 8'

and that the work of plugging and filling said well was completed on the 25th day of July, 2003.

And furthur deponents saith not.

Bill Wade

Sworn and subscribed before me this 4th day of September, 2003

My commission expires April 4, 2006

Notary Public

OFFICIAL SEAL
NOTARY PUBLIC
STATE OF WEST VIRGINIA
S. DIANNE DULANEY
P.O. Box 5519
Vienna, West Virginia 26105
My Commission Expires April 4, 2006

9/9/03

4703902210

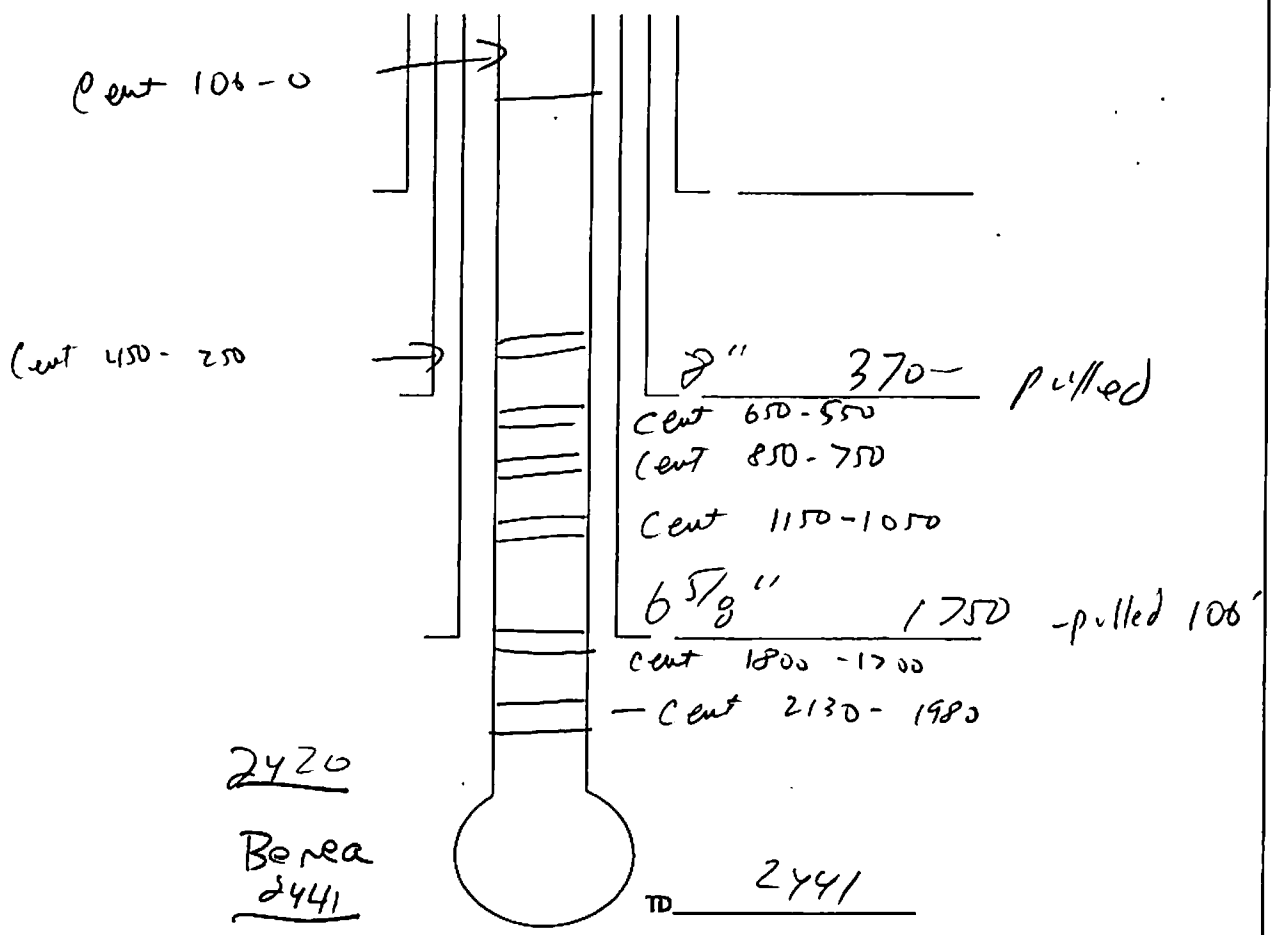
From Drillers Records/Plugging Records

Pulled 1900' 5 1/2" CSNG

EP Roll 12

Griffithsville Unit #2 Field

47-043- 0 2210



pulled 1900' 5½" csng

From Drillers Records/Plugging Records

OOG Internal Use Only

AOR - Well Review Checklist

umber: 47- 043 - 30961 Area Permit Number: 2R AP

erator Name: H 6 Energy

Operator's Well #: 13

Farm Name: EP Bell

Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐

Well Status: Active ☐ Abandoned ☐ Plugged ☒

TD of well: 2449

Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐

Easting: 417,546 Northing: 4,231,330

Elevation: 288

Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☒ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**

Bottom Hole Injection Pressure **0**

Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:

Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043 - 30961

RECORD of Well No. 13 on C. C. Well Farm Acres

Field, District County

Rig Commenced 19 , Completed 19

Drilling Commenced Dec 23 1913 Completed Feb 5 1914

Cost per foot, 11½ Contractor Bone Dorsey Co. Address, Glenville W. Va.

Drillers' Names J. N. Nauss & Geo. Brechbill

CONDUCTOR AND CASING USED IN DRILLING

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅝ Inch	6¼ Inch	6¼ Inch	5⅛ Inch	5 3-16-Inch	4⅜ Inch
14				285		1769				

CONDUCTOR AND CASING LEFT IN WELL

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7¾ Inch	6¼ Inch	6¼ Inch	5¼ Inch	5 3-16 Inch	4¾ Inch
14						1769				

OIL WELL

GAS WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods	Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure
2/7/14	80 qts	2nd Shot 4/10/13	1320						

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
		14	14	Hole filled up Water at 1120'
Red Rock	14	89	75	
Sand	89	139	50	
Slate	139	189	50	
Sand	189	219	30	
Slate	219	275	56	
Sand	275	600	325	
Slate	600	645	45	
Sand	645	765	120	
Slate	765	855	90	
Sand	855	955	100	
Slate	955	1015	60	
Big Sand	1015	1655	640	
Slate	1655	1670	15	
Maxton Sand	1670	1695	25	
Slate	1695	1715	20	
Little Lime	1715	1751	36	
Pencil Cave	1751	1755	4	
Big Lime	1755	1940	185	
Keener Sand	1940	2020	80	
Slate	2020	2415	395	
Slate	2415	2429	14	
Berea Sand	2429	2449	20	

47-043-30961

FORM GG-3

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

No coal
COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

Ephraim Griffith
LEASE OR PROPERTY OWNER

Yawkey, W. Va.
ADDRESS

Bradford Supply Company
NAME OF WELL OPERATOR

Bradford, Pa.
COMPLETE ADDRESS

March 6th 19 51
WELL AND LOCATION

Duval District

Lincoln County

Well No. 13

E. P. Bell Farm

STATE INSPECTOR SUPERVISING PLUGGING D. E. Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

Hugh Cravens and Paul McClure 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 Bradford Supply Company, well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 26 day of February, 19 51, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD	FILLING MATERIAL			PLUGS USED	CASING	
FORMATION	CONTENT	FROM	TO	SIZE & KIND	CSG PULLED	CSG LEFT IN
Berea	Bridge	2400				
	Clay	2400	2200			
	Cement	2200	2190			
	5' Gr.Stone			2" tubing	2439	0
	Clay	2190	2160			
	Bridge	2050		5½" cas.	1792	0
	Clay	1940	1940			
	Cement	1940	1930	7" "	1769	0
	5' Gr.Stone					
	Bridge	1400				
Salt	5' Gr.Stone					
	Clay	1400	995			
	Cement	995	995			
	Bridge	300				
	Cement & bags					
COAL SEAMS	Clay to surface.					
(NAME)				7" pipe filled with cement.		
(NAME)						
(NAME)						
(NAME)						

MAY 1951
WEST VIRGINIA
DEPARTMENT OF MINES
OIL & GAS DIVISION

and that the work of plugging and filling said well was completed on the 6th day of March, 19 51.

And further deponents saith not.

Hugh Cravens
Paul McClure

Sworn to and subscribed before me this 13th day of March, 1951

H. T. Sprinkle
Notary Public.

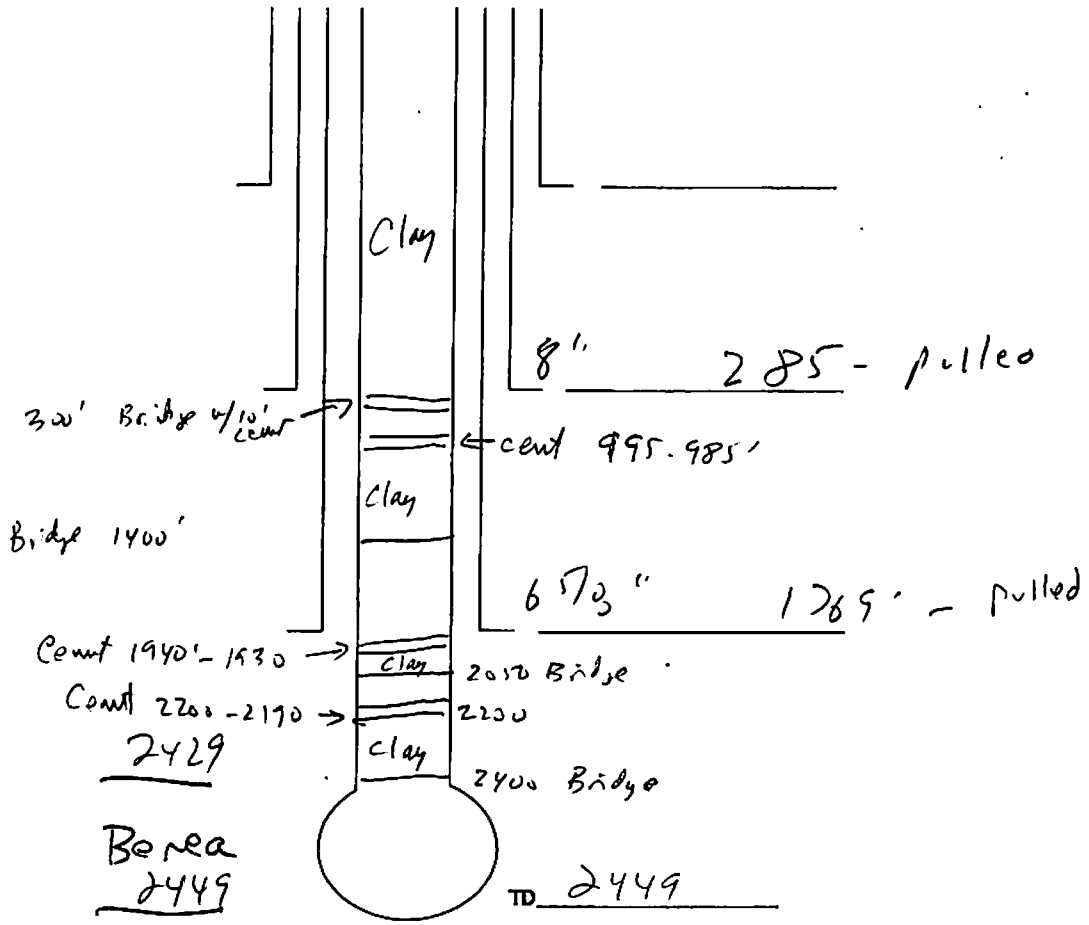
My commission expires Nov. 2 1951

Permit No. LIN-961.

EP Bell 13

Griffithsville Unit #2 Field

47-043- 30961



From Drillers Records/Plugging Records

5 1/2 Csg - 1798 pulled.

WVDEP OOG Internal Use Only
Rev. 6/14/16

31

AOR - Well Review Checklist

API Number: 47- 043 - 30248 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 14
Farm Name: E P Bell
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2500
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 417,598 Northing: 4,231,494
Elevation: 308
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

RECORD of Well No. 14 on E P Well Farm Acres 47-043-30248

Field, ... District ..... County .....

Rig Commenced ..... 19 ..., Completed 19

Drilling Commenced Feb 18 1914, Completed April 1 1914

Cost per foot, 1½ Contractor, Boone Drilling Co. Address Yawkey W.Va.

Drillers' Names J.H. Hanes and S.E. Dreibelbis

CONDUCTOR AND CASING USED IN DRILLING

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅝ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 3-10-Inch	4¼ Inch
14						1820			1037	

CONDUCTOR AND CASING LEFT IN WELL pulled 1037

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅝ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 3-10 Inch	4¼ Inch
14						1820			None	

OIL WELL

pulled 37 4" left 1742' 8"

GAS WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods		Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure
4/3/14	80qts									

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Soil		14	14	
Sand	14	54	40	
Slate	54	129	75	
Sand	129	179	50	
Slate	179	329	150	325' to Reduced Hole
Sand	329	629	300	
Slate	629	644	15	
Sand	644	734	90	
Slate	734	934	200	
Sand	934	1034	100	
Slate	1034	1100	66	
Salt Sand	1100	1735	634	Hole full of Water 1195'
Slate	1735	1745	10	
Maxton Sand	1745	1775	30	
Slate	1775	1777	2	
Little Lime	1777	1807	30	
Pencil Cave	1807	1813	6	
Big Lime	1813	1993	180	
Injun Sand	1993	2073	80	Abandoned 7/30/41
Slate	2073	2133	60	
Slate & Shells	2133	2295	162	
Slate	2295	2400	105	
Slate & Shells	2400	2465	65	
Brown Shale	2465	2481	16	
Berea	2481	2500	19	

47-043 - 30248

FORM OG-5

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

(NO COAL) — COAL OPERATOR OR OWNER
ADDRESS
COAL OPERATOR OR OWNER
ADDRESS
Ephraim Griffith — LEASE OR PROPERTY OWNER
Yawkey, W. Va. — ADDRESS

SOUTH PENN NATURAL GAS COMPANY — NAME OF OPERATOR
Union Trust Building, Parkersburg, W. Va. — COMPLETE ADDRESS
January 12, 1942 — WELL AND LOCATION
Duval — District
Lincoln — County
Well No. 14
E. P. Ball — Farm

STATE INSPECTOR SUPERVISING PLUGGING None

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

S. E. Lohman and Willis Sexton 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 South Penn Natural Gas Co. well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 1st day of July, 1941, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD FORMATION	FILLING MATERIAL CONTENT	FROM	TO	PLUGS USED SIZE & KIND	CASING CSG PULLED	CSG LEFT IN
Berea	Clay	2500	2461			
	Cement	2461	2451			
Permanent Bridge at		2103		377'4"-6-5/8"-1442'8"		
Big Injun	Clay	2103	1820			
Big Lime	Clay	1820	1793			
	Cement	1793	1783			
Little Lime	Clay	1783	1757			
	Cement	1957	1747			
Salt Sand	Clay	1747	1080			
	Cement	1080	1070			
	Clay	1070	to surface			

COAL SEAMS
(NAME)
(NAME)
(NAME)
(NAME)

DESCRIPTION OF MONUMENT
8-1/4" csg. 3' above surface. Filled with concrete. Inscribed S.P.N.G. Co. E.P.Ball #14. Abd. 7-30-41

and that the work of plugging and filling said well was completed on the 30th day of July, 1941.

And further deponents saith not.

S E Lohman
Willis Sexton

Sworn to and subscribed before me this 19th day of January, 1942.

Edith M. Henry
Notary Public.

My commission expires: February 6, 1948

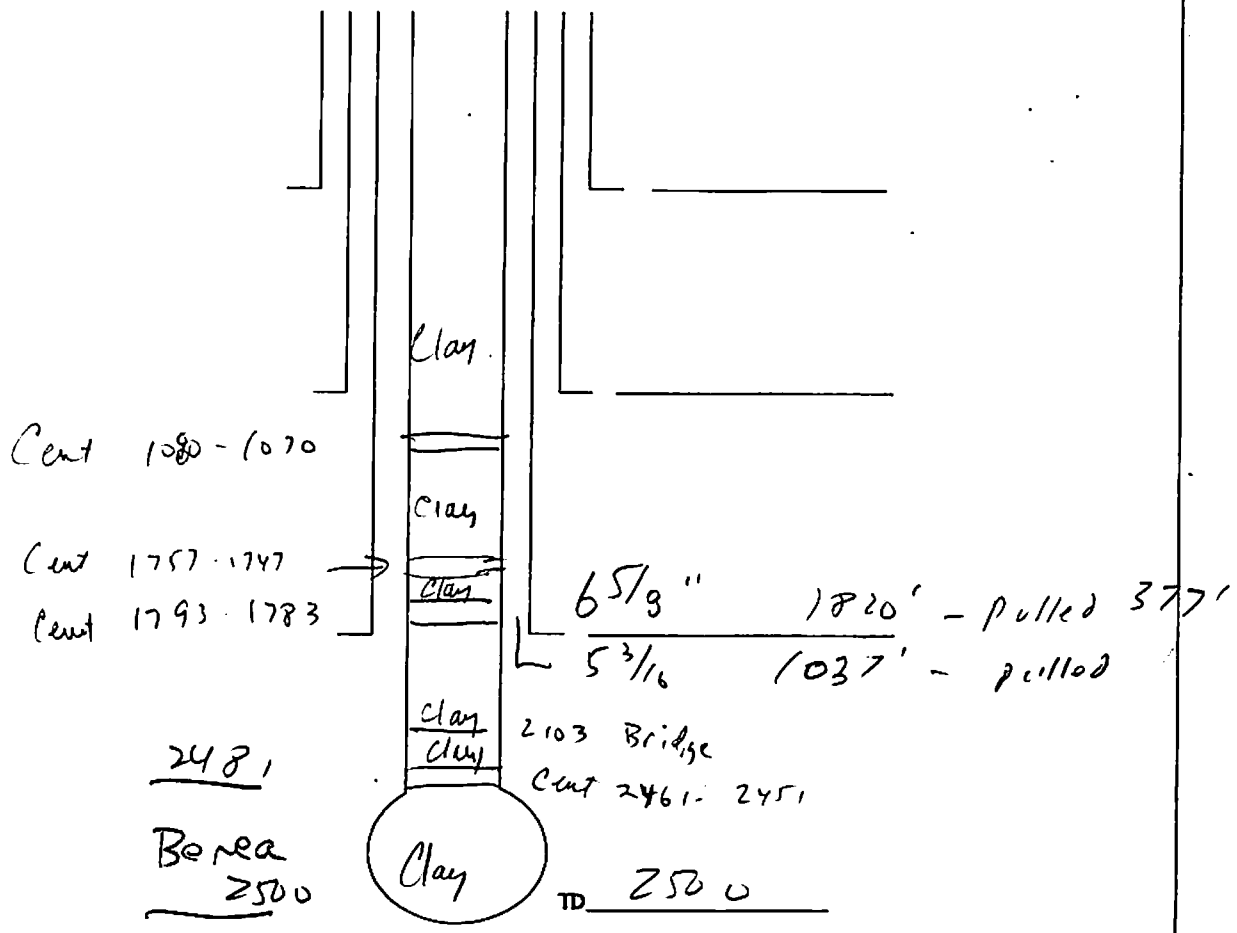
Cabell County, West Virginia

PERMIT No. LIN-248

EP Bell 14

Griffithsville Unit #2 Field

47-043- 30248



From Drillers Records/Plugging Records

.WVDEP OOG Internal Use Only
Rev. 6/14/16

(32)

AOR - Well Review Checklist

API Number: 47- 043 - 30247 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #:
Farm Name: Tannie Bell
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2528
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 416,376 Northing: 4,234,874
Elevation: 310
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐	
Date of Last MIT:	Passed?	No ☐	Yes ☐	
Open Hole Completion		No ☐	Yes ☒	
Well penetrates injection zone?		No ☐	Yes ☒	
Well perforated in injection zone?		No ☒	Yes ☐	
Cemented across injection zone?		No ☒	Yes ☐	
Packer immediately above injection zone (<100')?		No ☐	Yes ☐	No Packer ☐
		If No: Provide Depth:		
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒	

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-3024-7

RECORD of Well No. 1 on Lewis Lee Farm Acres

Field, Lincoln District Lincoln County

Drilling Commenced 19 Completed 19

Drilling Commenced April 1 1910 Completed 1910

Cost per foot Contractor Address

Drillers' Names

CONDUCTOR AND CASING USED IN DRILLING.

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅝ Inch	6⅝ Inch	6¼ Inch	6 5/16 Inch	4¾ Inch
14						1320			

CONDUCTOR AND CASING LEFT IN WELL.

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅝ Inch	6⅝ Inch	6¼ Inch	6 5/16 Inch	4¾ Inch
						1320	pulled		

OIL WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods
3½	11	22 bbls	1½	1½

GAS WELL

Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure
10	1311	1302		

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Soil		14	14	
Sandy	14	40	26	460' 10" fish mixed
Sand	40	70	30	710 8" Casing cut
Red Rock	70	300	230	
Sand	300	370	70	Hole full of salt water
Slate	370	400	30	Hard shell 1320
Sand	400	420	20	
Slate	420	450	30	
Coal	450	455	5	
Slate	455	475	20	
Sand	475	495	20	
Slate	495	920	425	
Sand	920	1160	240	
Slate	1160	1260	100	
Slate & Shells	1260	1770	510	
Lime & Shells	1770	1813	43	
Big Lime	1813	2000	185	
Lime & Shells	2000	2040	40	
Sand & Shells	2040	2500	460	
Sand & Lime	2500	2528	28	

Abandoned 9/13/11

47.043 - 3024

FORM OG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

Geo. Weimer — COAL OPERATOR OR OWNER
(If any)
St. Albans, W. Va. — ADDRESS

COAL OPERATOR OR OWNER — ADDRESS

(Same as above) — LEASE OR PROPERTY OWNER — ADDRESS

SOUTH PENN NATURAL GAS COMPANY, — NAME OF WELL OPERATOR
Union Trust Building, Parkersburg, W. Va. — COMPLETE ADDRESS

February 2, 19 42 — WELL AND LOCATION
Duval — District
Lincoln — County
Well No. 1
Fannie Bell — Farm

STATE INSPECTOR SUPERVISING PLUGGING None

AFFIDAVIT

STATE OF WEST VIRGINIA, }
County of Lincoln } ss:

Rex Mason and H. L. Atkinson 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 South Penn Natural Gas Co. well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 5th day of September, 19 41, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD FORMATION	FILLING MATERIAL CONTENT	FROM	TO	PLUGS USED SIZE & KIND	CASING CSG PULLED	CSG LEFT IN
Berea Sand	Clay	2578	2486			
	Cement	2486	2476			
Permanent Bridge	at	2070		6-5/8"-1820' ----		
Big Injun	Clay	2070	1820			
Big Lime	Clay	1820	1795			
	Cement	1795	1785			
Little Lime	Clay	1785	1750			
	Cement	1750	1740			
Salt Sand	Clay	1740	1240			
	Cement	1240	1230			
	Clay	1230	485			
	Clay	430	to surface			
COAL SEAMS				DESCRIPTION OF MONUMENT		
(NAME) No Name	Cement	485	430	8-1/4" csg.ext.3' above surface. Filled with cement. Inscribed on top - S.P.N.G.Co.-Fannie Bell #1.- Abd. 9-19-41		
(NAME)						
(NAME)						
(NAME)						

and that the work of plugging and filling said well was completed on the 19th day of September,

And further deponents saith not

Rex Mason
H. L. Atkinson

Subscribed and sworn before me this 13th day of February, 19 42

J. H. Smith
Notary Public.

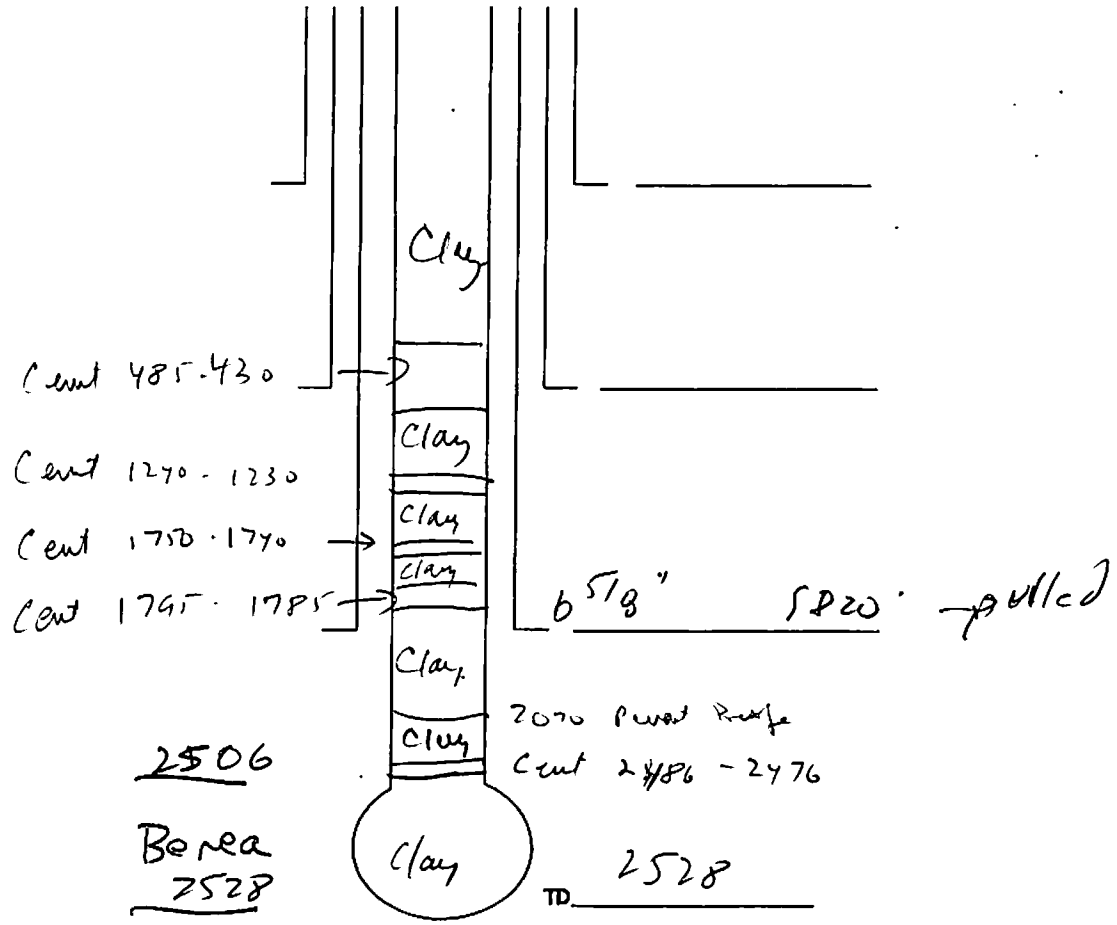
My commission expires: 7-1947

PERMIT No. LIN-247

Fannie Bell

Griffithsville Unit #2 Field

47-043- 30247



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

(33)

AOR - Well Review Checklist

API Number: 47- 043 -
Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 2
Farm Name: Tonnie Bell
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2530
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 416,504 Northing: 4,234,887
Elevation: 318
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☐

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Need WR37 NA

Reviewer Name: Signature:
Date Reviewed:

** Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

RECORD of Well No. 2 on Leonard Bird Farm Acres

Field, District County,

Rig Commenced 19 . Completed 19

Drilling Commenced Sept 10 1910, Completed Oct 25 1910

Cost per foot, 1.25 Contractor, Bailey & Hyman Drlg Co Address, Parkersburg W. Va.

Drillers' Names,

CONDUCTOR AND CASING USED IN DRILLING.

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7¼ Inch	6¼ Inch	6¼ Inch	5¼ Inch	5 3-16 Inch	4¾ Inch
16						1855'				

CONDUCTOR AND CASING LEFT IN WELL.

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7¼ Inch	6¼ Inch	6¼ Inch	5¼ Inch	5 3-16 Inch	4¾ Inch
16						1855'				

OIL WELL — GAS WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods		Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure
1910	Qts									

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Surface & Loose		16	16	El = 1017 ft above ground
Coal	16	26	10	
Big Dark	26	66	40	
Sand	66	126	60	
Slate	126	226	100	
Sand	226	246	20	
Slate	246	396	150	
Sand & Lime	396	1130	734	375' - 10" flow
Slate	1130	1170	40	
Coal & Sand	1170	1780	610	9 Barrow water at 1250
Slate	1780	1790	10	
Little Lime	1790	1825	35	Slate & coal streaks at 1275'
Pencil Cave	1825	1830	5	
Big Lime	1830	2000	170	
Big Injun	2000	2050	50	
Slate	2050	2160	110	
Sand	2160	2240	80	
Slate	2240	2493	253	
Brown Shale	2493	2511	18	
Dark Shale	2511	2536	14	

ABANDONED

1928

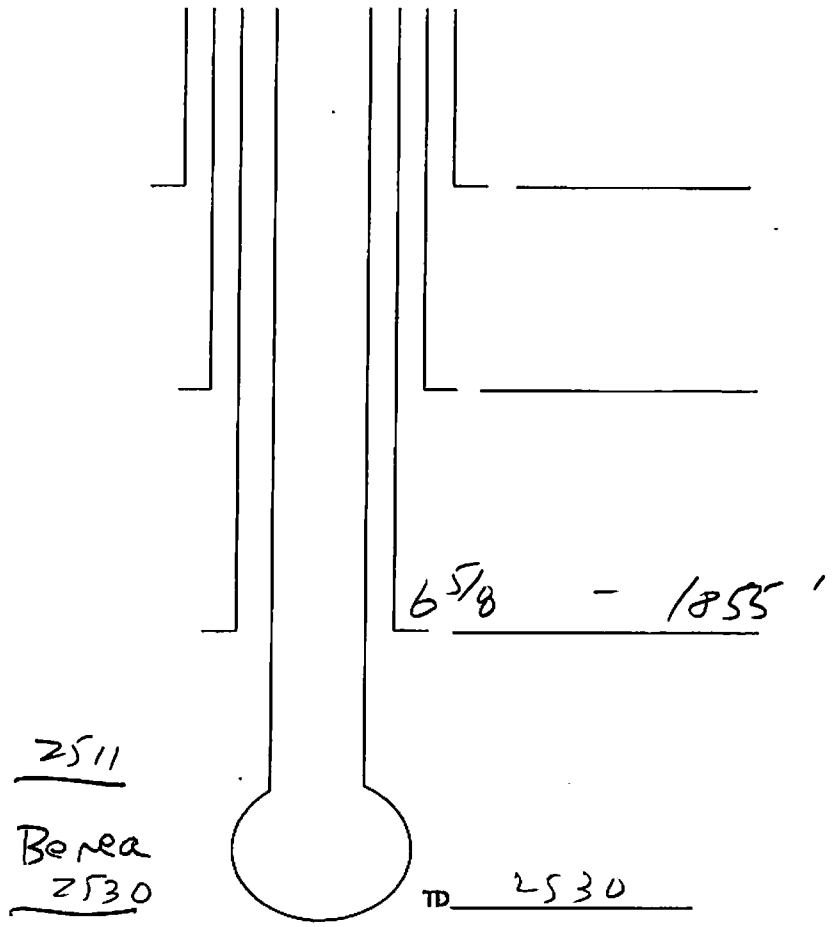
SEP 10 1990

	6⅝	5 3/16
Casing Head	855	940
Pulled	1640	940
Left	215	—

Fannie Bell 2

Griffithsville Unit #2 Field

47-043-



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

34

AOR - Well Review Checklist

API Number: 47- 043 -
Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 3
Farm Name: Fannie Bell
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2508
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 416,359 Northing: 4,234,678
Elevation: 306
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☐

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Need WI 38 NA

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

RECORD of Well No. 3 on Irene Bell Farm Acres

Field, District County,

Drilling Commenced July 14 19 10 Completed Aug 29 19 10

Cost per foot, 1.15 Contractor, Hawley & Thomas Drl Address, Jeanette, Pa.

Drillers' Names, P. J. Keating & J. E. Conley

CONDUCTOR AND CASING USED IN DRILLING.

Conductor	13 inch	10 inch	8¼ inch	8 inch	7⅝ inch	6⅝ inch	6¼ inch	5⅝ inch	5 3/16 inch	4¼ inch
16						1812				

CONDUCTOR AND CASING LEFT IN WELL.

Conductor	13 inch	10 inch	8¼ inch	8 inch	7⅝ inch	6⅝ inch	6¼ inch	5⅝ inch	5 3/16 inch	4¼ inch
16						1812				

OIL WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods
8/31/10	90qt.	11/10/17-120qts		

GAS WELL

Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure

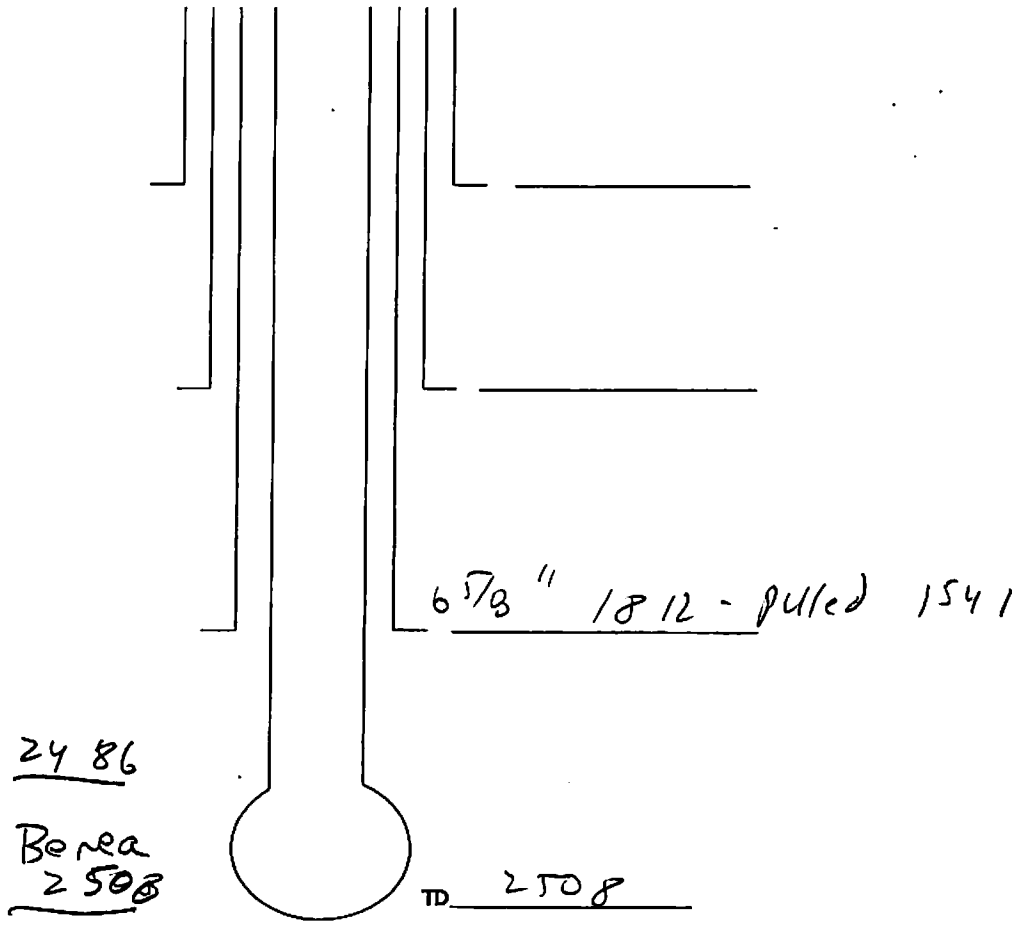
FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Soil		16	16	El= 998.62 ground
Big Lime	16	56	40	
Big Injun	56	450	394	
Sand	450	510	60	450' 10" Csg.
Slate	510	580	70	
Sand	580	680	100	
Slate	680	800	120	
Coal	800	805	5	
Sand	805	900	95	
Slate	900	970	70	
Sand	970	1030	60	
Slate	1030	1145	115	
Salt Sand	1145	1755	610	Salt, fresh water at 1210
Little Lime	1755	1795	40	
Pencil Cave	1795	1800	5	
Big Lime	1800	1985	185	
Big Injun	1985	2035	50	
Slate	2035	2115	80	
Keener Sand	2115	2275	160	
Slate	2275	2466	191	
Upper Sand	2466	2481	15	
Slate & Sand	2481	2508	27	

ABANDONED, JUL. 25, 1919

Fannie Bell 3

Griffithsville Unit #2 Field

47-043-



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

(35)

AOR - Well Review Checklist

API Number: 47- 043 - 30448 Area Permit Number: 2R AP

Operator Name: H 6 Energy

Operator's Well #: 4

Farm Name: Fannie Bell

Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐

Well Status: Active ☐ Abandoned ☐ Plugged ☒

TD of well: 2695

Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐

Easting: 416,494 Northing: 4,234,659

Elevation: 351

Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = 0

Bottom Hole Injection Pressure 0

Hydrostatic Pressure 0

Comments:

Reviewer Name: Signature:

Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-30448

Record of Well No. 4 on Vincent Bell Farm Acres

Field. Duval District Lincoln County Wirt

Drilling Commenced 19 Completed 19

Drilling Commenced July 26 1911. Completed Sept 17 1911

Cost per foot 1.10 Contractor, Ohio Oil Co. Address, Parkersburg W.Va.

Drillers' Names, A. A. Miller & E. L. Williamson

CONDUCTOR AND CASING USED IN DRILLING.

	13 inch	10 inch	8¼ inch	8 inch	7⅝ inch	6⅝ inch	6¼ inch	5 5/16 inch	4¾ inch
Conductor				540		2005'			
6									

CONDUCTOR AND CASING LEFT IN WELL.

	13 inch	10 inch	8¼ inch	8 inch	7⅝ inch	6⅝ inch	6¼ inch	5 5/16 inch	4¾ inch
Conductor						2005'			
6									

OIL WELL

When Shot	Size of Torpedo	1st Day's Production
9/18/11	90 qts.	

GAS WELL

Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Soil		6	6	El=
Red Rock	6	76	70	
Mixed Shale	76	126	50	
Sand	126	213	87	
Red Rock	213	298	85	
Shale	298	358	60	
Red Rock	358	468	110	
Sand	468	528	60	
Shale	528	538	10	
Coal	538	540	2	Reamed 10" hole 540'
Slate	540	695	155	
Sand	695	795	100	
Shale	795	855	60	
Sand	855	1025	170	
Slate	1025	1125	100	
Sand	1125	1205	80	
Slate	1205	1285	80	
Brown Sand & S.	1285	1330	45	
Salt Sand	1330	1960	630	1½ Salt water at 1360'
Little Lime	1960	1990	30	3 bailers in 2 hrs. hole
Pencil	1990	1995	5	filled full at 1430'
Big Lime	1995	2175	180	
Injun. Sand	2175	2255	80	traces of water in Injun Sand
Berea Shale & Shells	2255	2655	400	
Brown Shale	2655	2675	20	
Berea Sand	2675	2695	20	

47.043 - 30448

FORM OG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

LEASE OR PROPERTY OWNER

ADDRESS

NAME OF WELL OPERATOR: UNITED FUEL GAS COMPANY

COMPLETE ADDRESS: CHARLESTON, W. VA.

WELL AND LOCATION: APRIL 26, 19 49

DUVAL District

LINCOLN County

Well No. 4

FANNIE BELL Farm

STATE INSPECTOR SUPERVISING PLUGGING: D. E. LAWSON

AFFIDAVIT

STATE OF WEST VIRGINIA, }
County of LINCOLN } ss:

E. J. ELKINS and KENZIE BROWNING 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 R. H. ADKINS, well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 2 day of OCTOBER, 19 48, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD	FILLING MATERIAL			PLUGS USED	CASING	
FORMATION	CONTENT	FROM	TO	SIZE & KIND	CSG PULLED	CSG LEFT IN
BEREA	Set Bridge 20' above Berea at 2655'. Filled hole 100' with non-porous material. Set 10' Cement Plug on same, sealing off Berea Sand.					
LIME INJUN	Set Bridge 30' below Big Injun Sand at 2285'. Filled Hole through Big Injun and Big Lime with non-porous material at 20' above Big Lime Set 10' cement Plug on same 1975' to 1965', sealing off Big Injun and Big Lime. Pulled 6-5/8" Casing as hole was filled.					
SALT SAND	Filled hole from 1965' with non-porous material to 20' above top of Salt Sand, Set 10' Cement Plug on same at 1310'. to 1300', sealing off Salt Sands.					
	Opened hole to 200'; set bridge and 10' Cement Plug on same at 200' to 190'.					
	Filled hole with non-porous material to surface. Set Cement marker 12" x 12 x 30" marking date of abandonment.					

COAL SEAMS	DESCRIPTION OF MONUMENT
(NAME)	U. F. GAS CO.
(NAME)	FANNIE BELL # 4
(NAME)	DATE OF ABANDONMENT.
(NAME)	

and that the work of plugging and filling said well was completed on the 1 day of June, 19 49

And further deponents saith not.

E. J. Elkins
Kenzie Browning

Sworn to and subscribed before me this 1 day of June, 19 49

Notary Public.

My commission expires: August 1, 1957

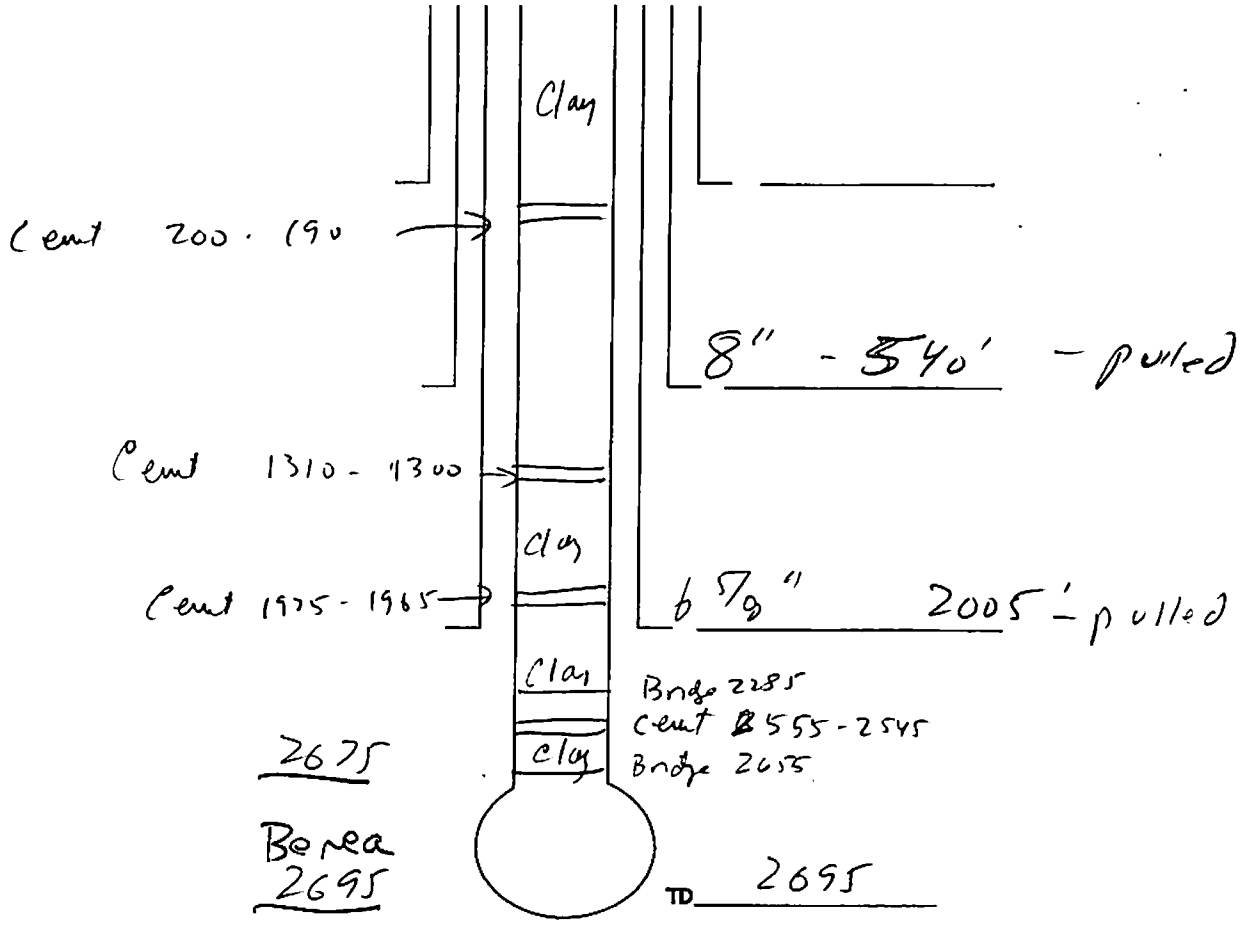
Permit No. LIN-448

(1)

Fannie Bell 4

Griffithsville Unit #2 Field

47-043- 3044-D



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

(36)

AOR - Well Review Checklist

API Number: 47- 043 - 30218 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 1
Farm Name: W T Bell
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2216
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 417 984 Northing: 4,230,579
Elevation: 726
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-30218

Record of Well No. 1 on W. T. Osell Farm Acres 219 1/2

Well Field. District County.

Commenced 19 Completed 19

Drilling Commenced June 2nd 1909 Completed June 22 1909

Cost per foot 1.15 Contractor Mc Bride & Mc Gee Address

Drillers' Names Frank Burt and J. B. Collins

CONDUCTOR AND CASING USED IN DRILLING.

	13 inch	10 inch	8¼ inch	8 inch	7⅝ inch	6¾ inch	6¼ inch	6⅛ inch	5 3-16 inch	4¾ inch
Conductor		32	280			1315			1516	

CONDUCTOR AND CASING LEFT IN WELL. Pulled 1496

	13 inch	10 inch	8¼ inch	8 inch	7⅝ inch	6¾ inch	6¼ inch	6⅛ inch	5 3-16 inch	4¾ inch
Conductor		32	280			1315				

OIL WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods
7/26/09	60 qts	2nd shot	3/8/10	220 qts.
2nd shot		3/8/10	2170	

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Surface sand	870	1465	595	
Slate	1465	1468	3	
Little Lime	1468	1508	40	
Slate	1508	1511	3	
Big Lime	1511	1700	189	
Red Rock	1700	1750	50	
Slate & Shells	1830	1830	80	
Salt Sand	1830	1890	60	
Slate	1890			
Pencil Sand	2202	2216	14	Oil at 2202

GAS WELL

Size of Packer	Depth Set	Tubing	1st Black Pressure	Rock Pressure

Abandoned June 11-1940.

FORM OG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

47-043-30218

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

(NO COAL) — COAL OPERATOR OR OWNER
ADDRESS

COAL OPERATOR OR OWNER
ADDRESS

Mrs. W. T. Bell, — LEASE OR PROPERTY OWNER
Yawkey, W. Va. — ADDRESS

SOUTH PENN NATURAL GAS COMPANY — NAME OF WELL OPERATOR
Union Trust Building, Parkersburg, W. Va. — COMPLETE ADDRESS

February 19 41 — WELL AND LOCATION
Duval District
Lincoln County
Well No. 1
W. T. Bell Farm

STATE INSPECTOR SUPERVISING PLUGGING No Inspector present while Abandoning.

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

E. M. Lemasters and Ross Vickers 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 South Penn Natural Gas Co well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 6th day of May, 1940, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD — FORMATION	FILLING MATERIAL — CONTENT	FROM	TO	PLUGS USED — SIZE & KIND	CASING — CSG PULLED	CSG LEFT IN
Berea	Clay	2216	2182			
	Cement	2182	2172			
	Bridge Hole at	1787				
Big Injun	Clay	1787	1684			
	Clay	1684	1596		1596-5-3/16	
	Clay	1596	1550		1450-6-5/8	100'
Big Lime	Clay	1550	1491			
	Cement	1491	1481			
Salt Sand	Clay	1481	830			
	Cement	830	820			
	Rock-Gravel	820	280		280-8-1/4"	
	Rock-Gravel	280	32		32-10"	
	Rock-Gravel	32	to surface			

COAL SEAMS
(NAME)
(NAME)
(NAME)
(NAME)

DESCRIPTION OF MONUMENT
8¼" Casing Extending 3 Ft. above Surface, filled with Cement, Inscribed on top S.P.N.G.Co. W.T. Bell # 1. Abd. 6-11-40.

and that the work of plugging and filling said well was completed on the 11th day of June, 1940.

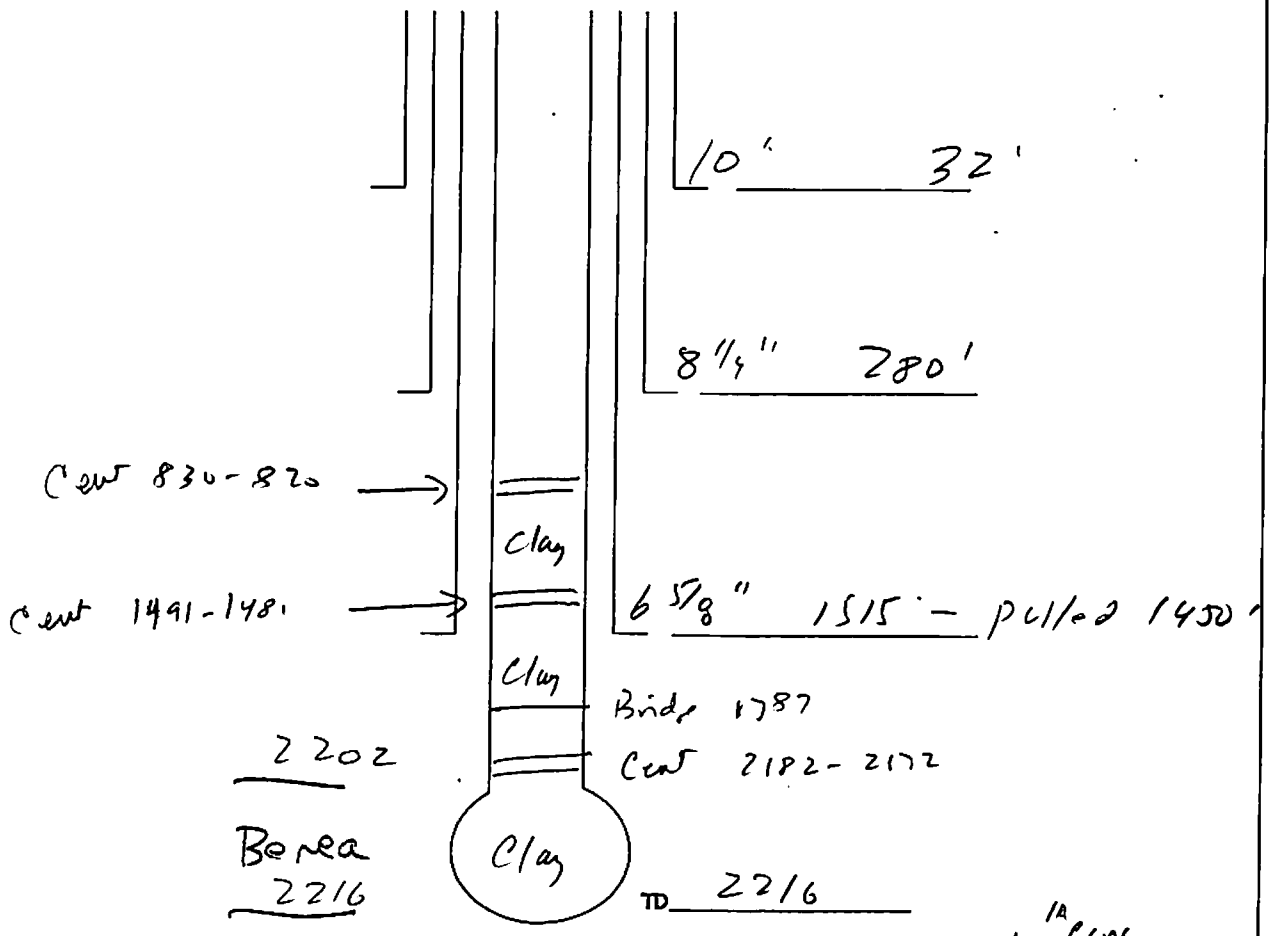
And further deponents saith not.

E M Lemasters
Ross Vickers

WT Bell 1

Griffithsville Unit #2 Field

47-043- 30218



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

(37)

AOR - Well Review Checklist

API Number: 47- 043 - 0220 Area Permit Number: 2R AP

Operator Name: H 6 Energy

Operator's Well #: 2

Farm Name: WT Bell

Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐

Well Status: Active ☐ Abandoned ☐ Plugged ☒

TD of well: 2349

Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐

Easting: 417,946 Northing: 4,230,720

Elevation: 263

Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐	
Date of Last MIT:	Passed?	No ☐	Yes ☐	
Open Hole Completion		No ☐	Yes ☒	
Well penetrates injection zone?		No ☐	Yes ☒	
Well perforated in injection zone?		No ☒	Yes ☐	
Cemented across injection zone?		No ☒	Yes ☐	
Packer immediately above injection zone (<100')?		No ☐	Yes ☐	No Packer ☐
		If No: Provide Depth:		
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒	

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**

Bottom Hole Injection Pressure **0**

Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:

Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-02220

RECORD of Well No. 2 W. T. Bell Farm Acres 60 Gauley
Well Field, Duval District Lewis County, W. Va.
Rig Commenced ..... 19..., Completed ..... 19...
Drilling Commenced Aug 7 1909, Completed Sept 17 1909
Cost per foot, 1.10 Contractor, Wm. Bruce & Wm. Bruce Address, Parkersburg
Drillers' Names, J. B. Colbert & C. A. Kelly

CONDUCTOR AND CASING USED IN DRILLING.

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7½ Inch	6⅝ Inch	6¼ Inch	6⅝ Inch	6 5-16 Inch	4½ Inch
16			342			1655				

CONDUCTOR AND CASING LEFT IN WELL.

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7½ Inch	6⅝ Inch	6¼ Inch	6⅝ Inch	6 5-16 Inch	4½ Inch
						1655				

OIL WELL — GAS WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods		Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure
9/15/09	60 qts	2 Bbls	17/2 Bbls	2 10 qts						

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Sand	260	345	85	1st Water 190 ft
Slate	345	360	15	2nd Water 335
Lime	360	400	40	
Sand	400	525	125	Gas ~~[illegible]~~ 870 : 45
Coal	525	528	3	
Slate	528	600	72	
Lime	600	640	40	
Sand	640	700	60	
Slate	742	800	58	
Lime	800	860	60	
Sand & Shells	860	990	130	
Salt Sand	990	1610	620	Water at 1010
Slate	1610	1615	5	
Little Lime	1615	1642	27	
Slate & Shell	1642	1647	5	
Big Lime	1647	1832	185	
Keel & Injun	1832	1885	53	
Sand & Shells	1885	2320	435	
Brown Shale	2320	2330	10	
Top Berea	2330	2349	19	Oil at 2330

API# 47- 043 - 2220

WR-38
Rev. 5/08

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL & GAS

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE IN TRIPLICATE, one copy mailed to the Department, 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: W.T. Bell
Location: Elevation: 877'
District: Duval
Latitude: _____ Feet South of: _____ Deg. _____ Min. _____ Sec.
Longitude: _____ Feet West of: _____ Deg. _____ Min. _____ Sec.

Operator Well No.: No.2
Quadrangle: Griffithsville 7.5'
County: Lincoln

Well Type: Oil X Gas _____ WIW _____

Company: East Resources Inc.
P.O. Box 5519
Vienna, WV 26105
Agent: Philip S. Ondrusek

Permit Issued: 4/19/10

Coal Operator or Owner: NA

Coal Operator or Owner: _____

AFFIDAVIT

State of West Virginia, County of Wood ss:

Mark Miller and Paul Stevens 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 operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 3rd day of August, 20 10 and the well was plugged and filled in the following manner:

TYPE	FROM	TO	PIPE REMOVED	LEFT
Cement	2320'	2120'	6 5/8" 0'	1655'
Cement	1702'	1600'		
Cement	1013'	900'		
Cement	550'	450'		
Cement	109'	0'		
		Perforated 6 5/8" casing 4 shots: 953' - 948', 503' - 498' &		
		100' - 96'		
6% Gel Between Cement Plugs				

Description of monument: 7" x 5' and that the work of plugging and filling said well was completed on the 13th day of August, 20 10

And further deponents saith not. Mark Miller

Roger McCormack

Sworn and subscribed before me this _____ day of _____, 20___

My commission expires: _____

Notary Public _____

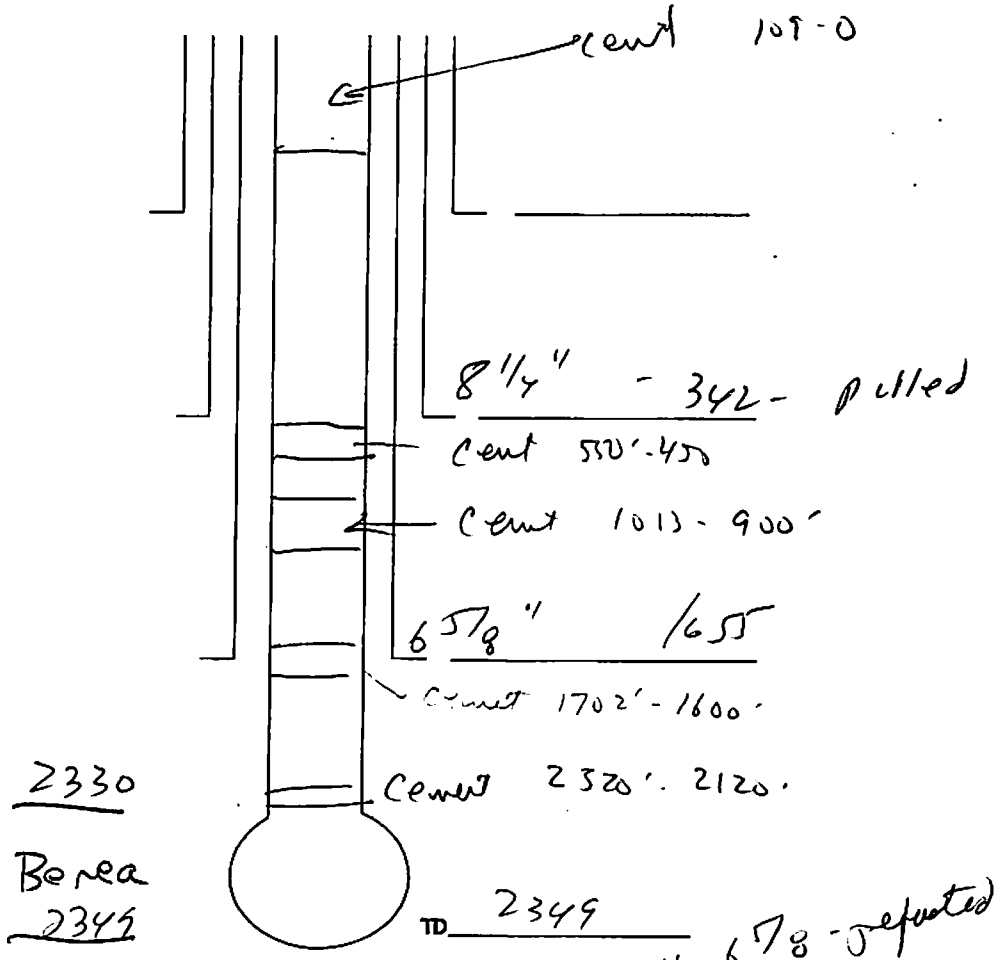
Affidavit reviewed by the Office of Oil and Gas: Randall D. Triplett

Title: District Inspector

WT Bell 2

Griffithsville Unit #2 Field

47-043- 02220



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

(38)

AOR - Well Review Checklist

API Number: 47- 043 - 30857 Area Permit Number: 2R AP

Operator Name: H 6 Energy

Operator's Well #: 3

Farm Name: WT Bell

Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐

Well Status: Active ☐ Abandoned ☐ Plugged ☒

TD of well: 2518

Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐

Easting: 417,531 Northing: 4,230,929

Elevation: 310

Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = 0

Bottom Hole Injection Pressure 0

Hydrostatic Pressure 0

Comments:

Reviewer Name: Signature:

Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

RECORD of Well No. 3 on W. J. Bell Farm ..... Acres .....

..... Field, ... District ..... County, ...

Rig Commenced ..... 19....., Completed ..... 19.....

Drilling Commenced Nov 1 1909., Completed June 2 1910

Cost per foot, 1/5 Contractor, Hunter & Frame Drlg Address, Ganey, Ill

Drillers' Names, J. K. Hunter & L. L. Frame

CONDUCTOR AND CASING USED IN DRILLING.

Conductor	13 inch	10 inch	8¼ inch	8 inch	7⅝ inch	6⅝ inch	6¼ inch	5⅝ inch	5 3-16 inch	4⅝ inch
14						1820				

CONDUCTOR AND CASING LEFT IN WELL.

Conductor	13 inch	10 inch	8¼ inch	8 inch	7⅝ inch	6⅝ inch	6¼ inch	5⅝ inch	5 3-16 inch	4⅝ inch
14						1820				

OIL WELL **GAS WELL**

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods		Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure
1/29/10	90 qts.	2 TS Shot	7/12	210 qts.						

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Soil & Clay		14	14	
Slate & Shells	14	160	146	
Sand	160	190	30	
Slate	190	345	155	
Sand	345	400	55	400' 10" hole
Slate & Sand	400	1090	690	
Slate	1090	1150	60	
Salt Sand	1150	1700	550	
Slate	1700	1710	10	Hole filled w/ water at 1800.
Red Rock	1710	1720	10	
Lime	1720	1740	20	
Slate	1740	1750	10	
Hard Lime	1750	1795	45	
Brown Lime	1795	1800	5	
Big Lime	1800	1980	180	
Keener Sand	1980	2050	70	
Slate	2050	2110	60	
Lime Shells	2110	2260	150	
Slate & Shells	2260	2478	218	
Pencil Cave	2478	2498	20	
Berea Sand	2498	2518	20	

17-043-30857

47-043 - 30857

FORM OG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER	West Virginia Pipe Project — NAME OF WELL OPERATOR
ADDRESS	Box 2452, Tulsa, Oklahoma — COMPLETE ADDRESS
COAL OPERATOR OR OWNER	December 5, 1949 — 19 — WELL AND LOCATION
ADDRESS	Duval — District
South Penn Gas Company — LEASE OR PROPERTY OWNER	Lincoln — County
Parkersburg, West Virginia — ADDRESS	Well No. 3
	W. T. Bell — Farm

STATE INSPECTOR SUPERVISING PLUGGING Dana E. Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA, County of Lincoln } ss:

Odis Parsons and S. S. Stephens, Jr. 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 West Virginia Pipe Project well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 13th day of October, 19 49, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD — FORMATION	FILLING MATERIAL — CONTENT	FROM	TO	PLUGS USED — SIZE & KIND	CASING — CSG PULLED	CSG LEFT IN
	Pulled 2" tubing. Set bridge at 2478' (20' above Berea) 2 sacks neat cement and 5' crushed stone, clay to 2378', cement to 2368'. Set bridge at 2050' (bottom of Big Injun) 2 sacks neat cement and 5' crushed stone. Pulled 5-3/16" casing. Filled with clay to 1850' (30' below 6-5/8" casing) 2 sacks neat cement and 5' crushed stone, sealing hole completely below 6-5/8" casing. Pulled 6-5/8" casing as balance of hole was plugged and filled. Set bridge at 1250' (in Salt Sand) 2 sacks neat cement and 5' crushed stone, clay to 1130' (20' above Salt Sand) cement to 1120'. Set bridge at 250', 2 sacks neat cement and 5' crushed stone, clay to surface and erect monument.				1862' of 5-3/16"	1820' of 6-5/8"

COAL SEAMS
(NAME)
(NAME)
(NAME)
(NAME)

DESCRIPTION OF MONUMENT: 12" x 12" x 30" concrete monument

RECEIVED DEC 1949 WEST VIRGINIA DEPARTMENT OF MINES

and that the work of plugging and filling said well was completed on the 18th day of October, 19 49.

And further deponents saith not.

Odis Parsons
S. S. Stephens Jr.

Sworn to and subscribed before me this 6th day of December, 19 49.

J R Osborne
Notary Public.

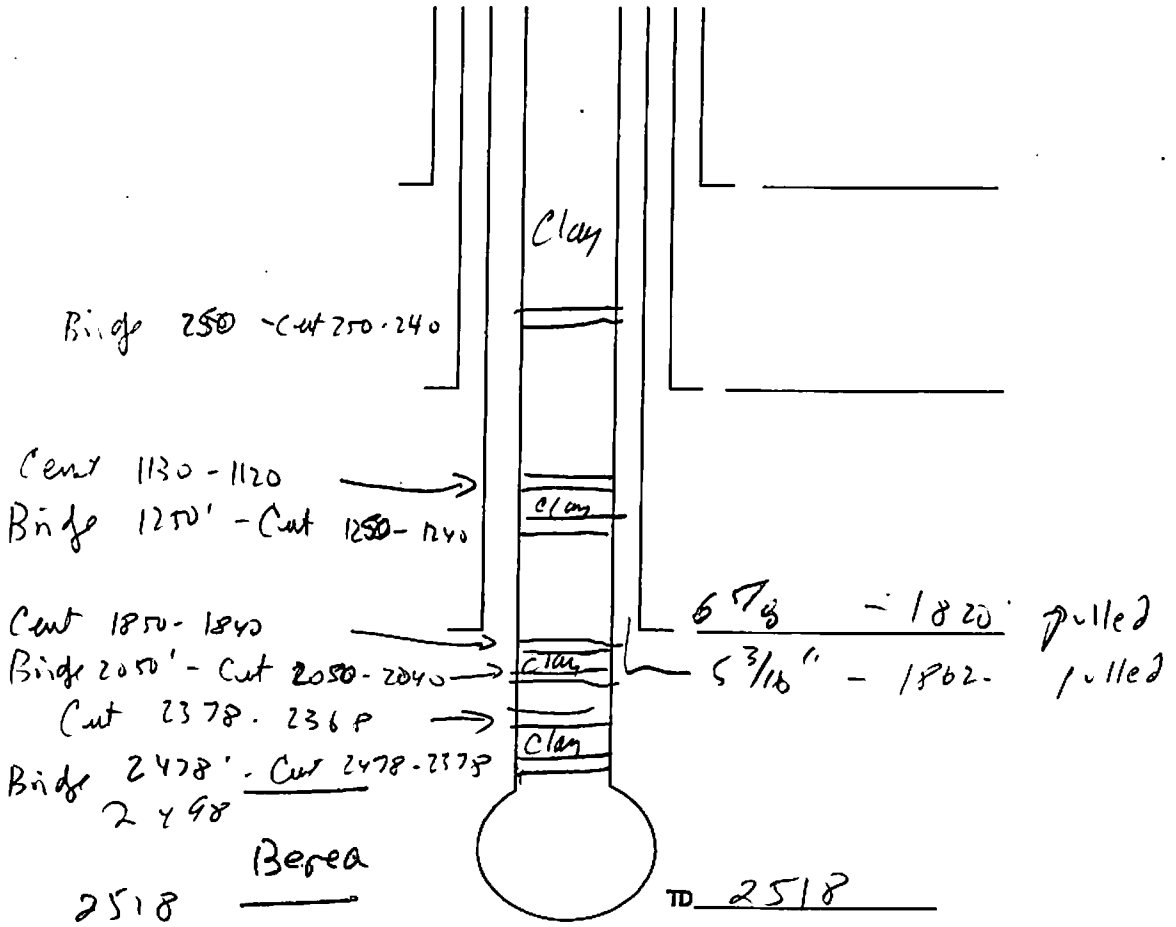
My commission expires: Oct-9-1957

Permit No. LIN-857

WT Bell 3

Griffithsville Unit #2 Field

47-043- 30857



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

39

AOR - Well Review Checklist

API Number: 47- 043 - 30616 Area Permit Number: 2R AP

Operator Name: H 6 Energy

Operator's Well #: 4

Farm Name: W T Bell

Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐

Well Status: Active ☐ Abandoned ☐ Plugged ☒

TD of well: 2466

Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐

Easting: 417,589 Northing: 4,230,773

Elevation: 299

Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = 0

Bottom Hole Injection Pressure 0

Hydrostatic Pressure 0

Comments:

Reviewer Name: Signature:

Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-30616

Record of Well No. 4 on W. I. Dill Farm Acres

Field. District County.

Commenced 19 Completed 19

Drilling Commenced Feb 5 1910. Completed March 24 1910

Cost per foot, 1.15 Contractor Lusby & Emmett Exit Coldiron, Clarksburg, W. Va.

Drillers' Names, C. J. Lusby & W. C. Lusby

CONDUCTOR AND CASING USED IN DRILLING.

Conductor	13 inch	10 inch	8¼ inch	8 inch	7⅝ inch	6⅝ inch	6¼ inch	6 5/16 inch	4½ inch
14						1775'			

CONDUCTOR AND CASING LEFT IN WELL.

Conductor	13 inch	10 inch	8¼ inch	8 inch	7⅝ inch	6⅝ inch	6¼ inch	6 5/16 inch	4½ inch
14						1775'			

OIL WELL — GAS WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods		Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure
3/31/10	40 qts	2nd Shot 9	9½	13 1502'	2" 1502'	6¼ x 3¼	1547'	½	110 qts	

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Surface Clay		14	14	
Sand	14	29	15	
Slate	29	160	131	
Sand	160	220	60	
Slate	220	245	25	
Sand	245	405	160	
Coal	405	410	5	
Slate & Sand	410	1035	625	
Slate	1035	1060	25	
Slate & Sand	1060	1680	620	Salt Water at 1155'
Slate	1680	1700	20	
Little Lime	1700	1760	60	
Pencil Cave	1760	1765	5	
Big Lime	1765	1950	185	
Big Injun	1950	2020	70	
Slate	2020	2100	80	
Lime Shells	2100	2250	150	
Slate	2250	2425	175	
Brown Shale	2425	2445	20	
Brea Sand	2445	2466	21	

47-043-3066

FORM OG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER — ADDRESS

COAL OPERATOR OR OWNER — ADDRESS

LEASE OR PROPERTY OWNER — ADDRESS

NAME OF WELL OPERATOR: United Fuel Gas Company
COMPLETE ADDRESS: Charleston, W. Va.
WELL AND LOCATION: May 10, 1949
Duval District
Lincoln County
Well No. 4
W. T. Bell Farm

STATE INSPECTOR SUPERVISING PLUGGING: D. E. Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

W. C. Pack and G. S. Woodall 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 R. H. Adkins well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 21 day of April, 1949, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD — FORMATION	FILLING MATERIAL — CONTENT	FROM	TO	PLUGS USED — SIZE & KIND	CASING — CSG PULLED	CSG LEFT IN
Berea	Set Bridge 20' above Berea Sand at 2425'. Filled hole 100' with Non-Porous material. Set 10' Cement Plug on same, sealing off Berea Sand. 5' crushed stone on Cement Plug.					
Lime Injun	Set Bridge 30' below Big Injun Sand at 2050'. Filled hole through Big Injun and Big Lime with non-porous material to 30' below pipe. Set 10' Cement Plug on same at 1805' to 1795', sealing off Big Injun and Big Lime. Set 5' crushed stone on cement plug. Filled hole as pipe was removed.					
Salt Sand	Filled hole from 1795' with non-porous material to 20' above top of Salt Sand. Set 10' Cement Plug on same at 1040' to 1020',					
	Sealing off Salt Sand.					
	Opened hole to 200'; Set Bridge and 10' Cement Plug on same at 200' to 190'.					
	Filled hole with non-porous material to surface. Set Cement Marker 12" x 12" x 30", marking date of abandonment.					

COAL SEAMS
(name)
(name)
(name)
(name)

DESCRIPTION OF MONUMENT
W. P. GAS CO.
W. T. BELL # 4
DATE OF ABANDONMENT

JUN 19 '23
WEST VIRGINIA
DEPARTMENT OF MINES

and that the work of plugging and filling said well was completed on the 28 day of April, 1949.

And further deponents saith not.

W C Pack
G S Woodall

Sworn to and subscribed before me this 28 day of April, 1949.

J. S. Smith
Notary Public.

My commission expires:
April 1, 1957

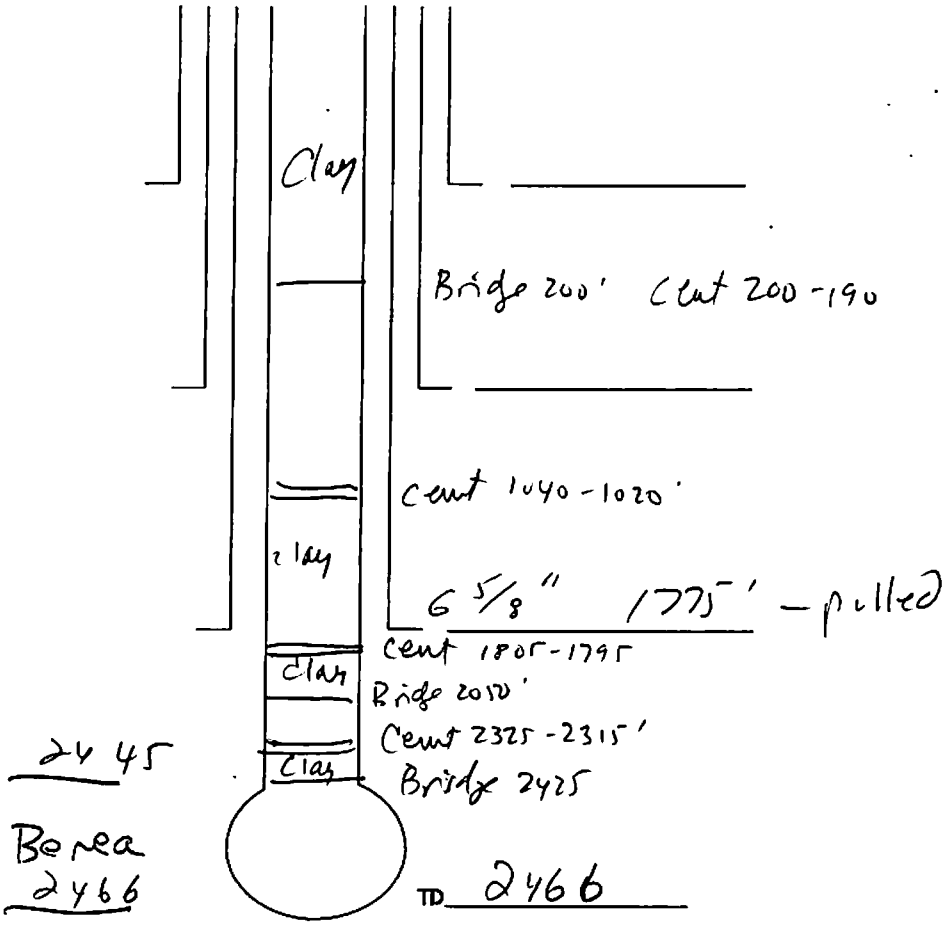
Permit No. LIN-616

(74)

WT Bell 4

Griffithsville Unit #2 Field

47-043- 30616



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

(40)

AOR - Well Review Checklist

API Number: 47- 043 - 31090 Area Permit Number: 2R AP

Operator Name: H 6 Energy

Operator's Well #: 5

Farm Name: WT Bell

Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐

Well Status: Active ☐ Abandoned ☐ Plugged ☒

TD of well: 2223

Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐

Easting: 417,779 Northing: 4,230,508

Elevation: 824

Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐	
Date of Last MIT:	Passed?	No ☐	Yes ☐	
Open Hole Completion		No ☐	Yes ☒	
Well penetrates injection zone?		No ☐	Yes ☒	
Well perforated in injection zone?		No ☒	Yes ☐	
Cemented across injection zone?		No ☒	Yes ☐	
Packer immediately above injection zone (<100')?		No ☐	Yes ☐	No Packer ☐
		If No: Provide Depth:		
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒	

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**

Bottom Hole Injection Pressure **0**

Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:

Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

RECORD of Well No. 5 on J. T. Wells Farm Acres 47-043-31090

Field, ... District ..... County, ...

Rig Commenced ..... 19..... Completed ..... 19.....

Drilling Commenced June 21 1909. Completed June 24 1910

Cost per foot, 1½ Contractor, [illegible] Address, [illegible]

Drillers' Names, L. L. Wells and H. L. [illegible]

CONDUCTOR AND CASING USED IN DRILLING.

Conductor	13 inch	10 inch	8¼ inch	8 inch	7⅝ inch	6⅝ inch	6¼ inch	5⅝ inch	5 3-16 inch	4¾ inch
21				280		1220				

CONDUCTOR AND CASING LEFT IN WELL.

Conductor	13 inch	10 inch	8¼ inch	8 inch	7⅝ inch	6⅝ inch	6¼ inch	5⅝ inch	5 3-16 inch	4¾ inch
21				280		1220				

OIL WELL

When Shot	Size of Torpedo	1st Day's Production
1/27/10	40 qts	3rd Shot

GAS WELL

Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure

Tubing 4½ in. 11 1/2 lbs.

Rods

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Surface		21	21	Elev. [illegible]
Sand	21	160	139	
Sand	160	140	30	
Salt	140	265	75	
Coal	265	270	5	
Sand	270	300	30	
Salt	300	375	75	
Sand	375	470	95	
Salt	470	560	90	
Sand	560	670	110	
Salt	670	780	110	
Sand	780	830	50	
Shale	830	850	20	
Big Sand	850	1420	570	Slight show of Water at 910
Salt	1420	1440	20	
Shale	1440	1460	20	
Salt	1460	1470	10	
Little Lime	1470	1510	40	
Pencil Cave	1510	1515	5	
Big Lime	1515	1700	185	
Keener Sand	1700	1795	95	
Salt	1795	1825	30	
Hard Shell	1825	1975	150	
Slate	1975	2183	208	
Sun Shale	2183	2203	20	
Berea Sand	2203	2219	16	
Slate	2219	2223	4	

Water Well 65 ft

47-043-31090

FORM OG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER: PACK & PACK, c/o Mr. Hal Pack
ADDRESS: Hamlin, West Virginia
NAME OF WELL OPERATOR
COAL OPERATOR OR OWNER:
ADDRESS:
COMPLETE ADDRESS
LEASE OR PROPERTY OWNER: July 6, 1953
ADDRESS:

WELL AND LOCATION

Duval District
Lincoln County
Well No. 5
W. T. Hall Farm

STATE INSPECTOR SUPERVISING PLUGGING D. E. Lemon

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

T. O. Roberts and Leslie J. Adkins, 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 Pack & Pack, well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 15 day of June, 1953, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD	FILLING MATERIAL			PLUGS USED	CASING	
FORMATION	CONTENT	FROM	TO	SIZE & KIND	CSG PULLED	CSG LEFT IN
	Bridge Set	2170'		All Pipe Recovered		
	Neat Cement	2170'	2160'			
	Crushed Stone	5'	-			
	Clay	-	2100'			
	Neat Cement	2100'	2090'			
	Bridge Set at	1790'				
	Neat Cement	1790'	1780'			
	Crushed Stone	5'				
	Clay	-	1550'			
	Neat Cement	1550'	1540'			
	Crushed Stone	5'	-			
	Bridge Set	1000'				
	Neat Cement	1000'	990'			
	Crushed Stone	5'	-			
	Clay	-	800'			
COAL SEAMS	Neat Cement	800'	790'	DESCRIPTION OF MONUMENT		
(NAME)	Bridge Set /	250'		Erected Marker According		
(NAME)	Neat Cement	250'	240'	Rule 18, 1951 Regulations		
(NAME)	Crushed Stone	5'				
(NAME)	Clay to Surface		-			

RECEIVED JUL 13 1953 DEPARTMENT OF MINES

and that the work of plugging and filling said well was completed on the 30 day of June, 1953.

And further deponents saith not.

T. O. Roberts
Leslie J. Adkins

Sworn to and subscribed before me this 13 day of July, 1953.

Notary Public.

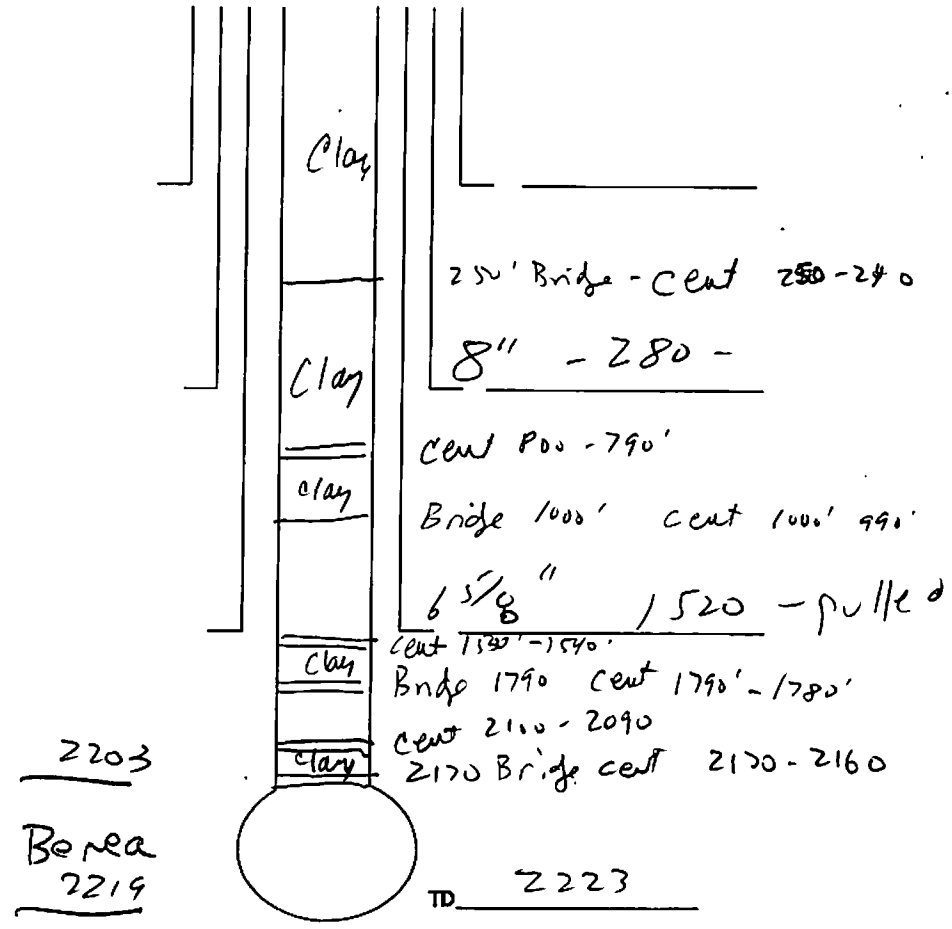
My commission expires: March 10-1960

Permit No. LIN-2090

WT Bell 5

Griffithsville Unit #2 Field

47-043- 31090



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

(41)

AOR - Well Review Checklist

API Number: 47- 043 - 30617 Area Permit Number: 2R AP

Operator Name: H 6 Energy

Operator's Well #: 6

Farm Name: W T Bell

Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐

Well Status: Active ☐ Abandoned ☐ Plugged ☒

TD of well: 2323

Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐

Easting: 417,686 Northing: 4,230,633

Elevation: 256

Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐	
Date of Last MIT:	Passed?	No ☐	Yes ☐	
Open Hole Completion		No ☐	Yes ☒	
Well penetrates injection zone?		No ☐	Yes ☒	
Well perforated in injection zone?		No ☒	Yes ☐	
Cemented across injection zone?		No ☒	Yes ☐	
Packer immediately above injection zone (<100')?		No ☐	Yes ☐	No Packer ☐
		If No: Provide Depth:		
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒	

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = 0

Bottom Hole Injection Pressure 0

Hydrostatic Pressure 0

Comments:

Reviewer Name: Signature:

Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

RECORD of Well No. 6 on W. T. Hill Farm Acres 47-043-30647

Field, District County,

Rig Commenced 19, Completed 19

Drilling Commenced Feb 2 1910. Completed Mch 26 1910

Cost per foot, 1.15 Contractor, [illegible] Address, [illegible]

Drillers' Names, J. M. Hostetter - J. P. Hostetter

CONDUCTOR AND CASING USED IN DRILLING.

Conductor	13 inch	10 inch	8¼ inch	8 inch	7⅝ inch	6¼ inch	6¼ inch	6¼ inch	6 5-16 inch	4¾ inch
14						1625'				

CONDUCTOR AND CASING LEFT IN WELL.

Conductor	13 inch	10 inch	8¼ inch	8 inch	7⅝ inch	6¼ inch	6¼ inch	6¼ inch	6 5-16 inch	4¾ inch
14						1625'				

OIL WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods
3/24/10	Qts	2nd	1625	210 qr.

GAS WELL

Size of Packer	Depth Set	Tubing	1st Effects Pressure	Rock Pressure

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Soil & Clay		14	14	[illegible]
Sand	14	75	61	
Slate	75	155	80	
Sand	155	215	60	
Slate	215	280	65	
Lime	280	370	90	
Slate	370	390	20	
Coal	390	395	5	
Sand	395	520	125	
Slate	520	630	110	
Sand	630	880	250	
Slate	880	940	60	
Salt Sand	940	1490	550	Gas found at 1000
Slate	1490	1500	10	
White Sand	1500	1550	50	
Slate	1550	1565	15	
White Lime	1565	1605	40	
Sand Rock	1605	1610	5	
Big Lime	1610	1790	180	
Big Lime Sand	1790	1850	60	
Slate	1850	1910	60	
Keener Shells	1910	2060	150	
Slate & Shells	2060	2283	223	
Brown Shale	2283	2303	20	
Big Lime	2303	2323	20	

41-043-3067

FORM OG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

LEASE OR PROPERTY OWNER

ADDRESS

United Fuel Gas Company
NAME OF WELL OPERATOR
Charleston, W. Va.
COMPLETE ADDRESS
May 20 19 49
WELL AND LOCATION
Duval District
Lincoln County
Well No. 6
W. T. Bell Farm

STATE INSPECTOR SUPERVISING PLUGGING D. E. Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

W. C. Pack and G. S. Woodall 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 R. H. Adkins, well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 14 day of April, 1949, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD	FILLING MATERIAL			PLUGS USED	CASING	
FORMATION	CONTENT	FROM	TO	SIZE & KIND	CSG PULLED	CSG LEFT IN
Berea	- Set Bridge 20' above Berea Sand at 2283'. Filled hole 100' with non-porous material. Set 10' cement Plug on same, sealing off Berea Sand.					
Lime Injun	- Set Bridge 30' below Big Injun Sand at 1880'. Filled hole through Big Injun and Big Lime with non-porous material to 30' below pipe. Set 10' 5' crushed stone on cement plug. Cement plug on same at 1655' to 1645', sealing off Big Injun and Big Lime. Set 5' crushed stone on cement plug. Filled hole as pipe was removed.					
Salt Sand	- Filled hole from 1645' with non-porous material to 20' above top of Salt Sand. Set 10' Cement Plug on same at 920' to 910' sealing off Salt Sand. Opened hole to 200'; Set Bridge and 10' Cement Plug on same at 200' to 190'. Filled hole with non-porous material to surface. Set Cement Marker 12" x 12" x 30" marking date of abandonment.					

COAL SEAMS	DESCRIPTION OF MONUMENT
(NAME)	U. F. GAS CO.
(NAME)	W. T. BELL # 6
(NAME)	DATE OF ABANDONMENT
(NAME)	

JUN 1949
WEST VIRGINIA
DEPARTMENT OF MINES

and that the work of plugging and filling said well was completed on the 20 day of April, 1949.

And further deponents saith not.

W. C. Pack
G. S. Woodall

Sworn to and subscribed before me this 20 day of April, 1949.

Notary Public.

My commission expires:
April 4, 1957

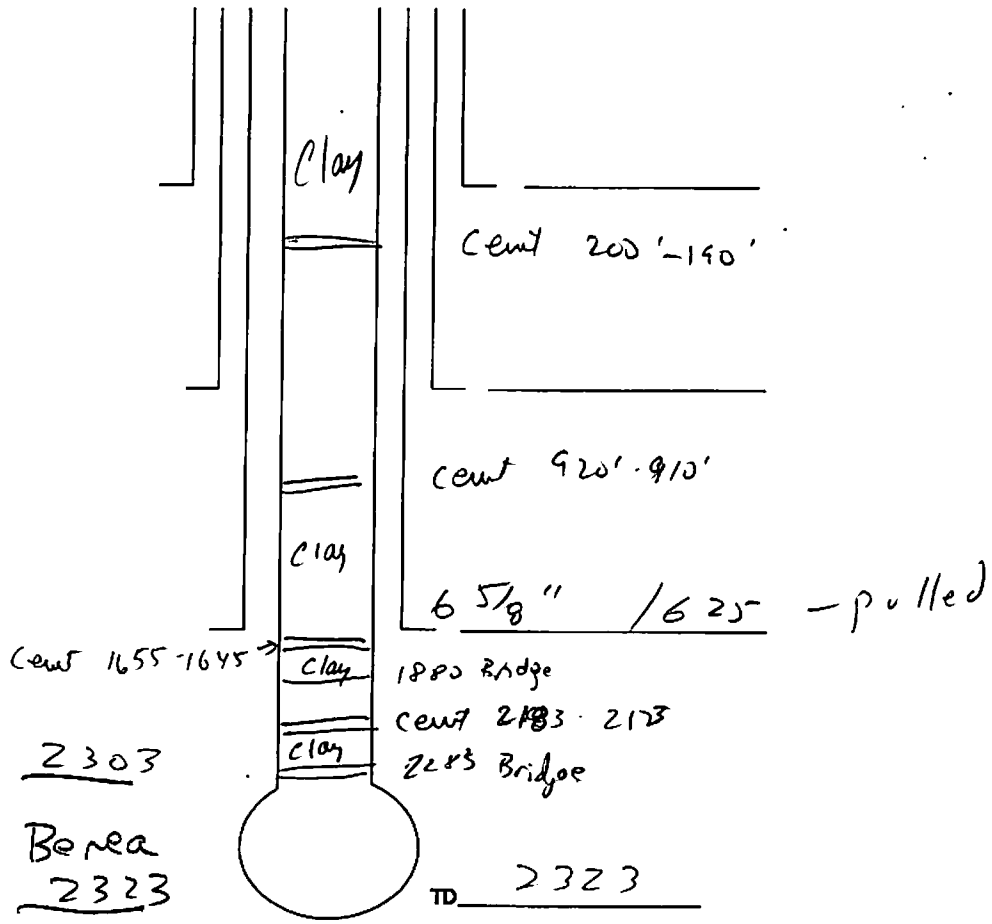
Permit No. Lin- 617

(15)

WT Bell 6

Griffithsville Unit #2 Field

47-043- 30617



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

(42)

AOR - Well Review Checklist

API Number: 47- 043 - 30444 Area Permit Number: 2R AP

Operator Name: H 6 Energy

Operator's Well #:

Farm Name: Fay Bowling (JE way)

Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐

Well Status: Active ☐ Abandoned ☐ Plugged ☒

TD of well: 2275

Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐

Easting: 416,317 Northing: 4,233,370

Elevation: 234

Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = 0

Bottom Hole Injection Pressure 0

Hydrostatic Pressure 0

Comments:

Reviewer Name: Signature:

Date Reviewed:

** Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

WELL RECORD

47-043-30444

Oil or Gas Well Oil (KIND)

ABANDONMENT

Permit No.

Company UNITED FUEL GAS CO.
Address P.O. Box 1273, Charleston 25, W. Va.
Farm J. E. May Acres 40½
Location (waters) Bear Fork
Well No. 1 Elev. 778.3
District Duval County Lincoln
The surface of tract is owned in fee by
Address
Mineral rights are owned by John D. May, et al
Address 1032 - 7th Ave. Huntington, W. Va.
Drilling commenced 3-5-08
Drilling completed 4-25-08
Date Shot 4-27-08 From To
With 3-20-11 90 Qts. & 150 Qts.
Open Flow /10ths Water in Inch
/10ths Merc. in Inch
Volume Cu. Ft.
Rock Pressure lbs. hrs.
Oil 115 bbls., 1st 24 hrs.
Fresh water feet feet
Salt water feet feet

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Packer
16			
13			Size of
10			
~~8~~ 8-5/8"	315'	315'	Depth set
6¼	1590'	1590'	
5 3/16	1300'	1300'	Perf. top
3			Perf. bottom
2			Perf. top
Liners Used			Perf. bottom

CASING CEMENTED SIZE No. Ft. Date

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

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks
Salt Sand			890	1550			
Little Lime			1560	1590			
Big Lime			1590	1756			
Injun Sand			1756	1835			
Brown Shale			2235	2255			
Berea			2255	2275			
Total Depth:				2275'			

JUL 1948
WEST VIRGINIA
DEPARTMENT OF MINES

FORM OG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

47-043-30444

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER _____
ADDRESS _____
COAL OPERATOR OR OWNER _____
ADDRESS _____
LEASE OR PROPERTY OWNER _____
ADDRESS _____

NAME OF WELL OPERATOR: United Fuel Gas Co.
COMPLETE ADDRESS: Charleston, W.Va.
WELL AND LOCATION: July 22, 1948
District: Duvall
County: Lincoln
Well No. 1
Farm: J.E.May

STATE INSPECTOR SUPERVISING PLUGGING D.E.Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA, County of Lincoln } ss:

E.J.Elkins Jr and Kenzie Browning 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 Hamlin Well Service Co., well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 10 day of July, 1948, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD / FORMATION	FILLING MATERIAL CONTENT	FROM	TO	PLUGS USED SIZE & KIND	CASING CSG PULLED	CASING CSG LEFT IN
			2235			
	Bridged	2235	2135			
	Mud Clay	2135	2125			
	Cement Plug	1865	1647			
	Bridged	1865	1647			
	Mud Clay	1647	1637	30' Below pipe		
	Cement Plug	1637	870			
	Mud Clay	870	860			
	Cement Plug	200				
	Bridged	200	190			
	Cement Plug	190	0			
	Mud Clay			2"Tubing		2284
				5" Casing		1292
				6" "		1617
				8" "		315
COAL SEAMS				DESCRIPTION OF MONUMENT		
(NAME)				Monument 18 x 18 x 30		
(NAME)				Inscription on Mounument		
(NAME)				U.F.G.CO. J.E.May No 1		
(NAME)				Abn. 7-31-48		

and that the work of plugging and filling said well was completed on the 24 day of July, 1948.

And further deponents saith not.

E.J.Elkins Jr
Kenzie Browning

Sworn to and subscribed before me this 28 day of July, 1948.

Notary Public.

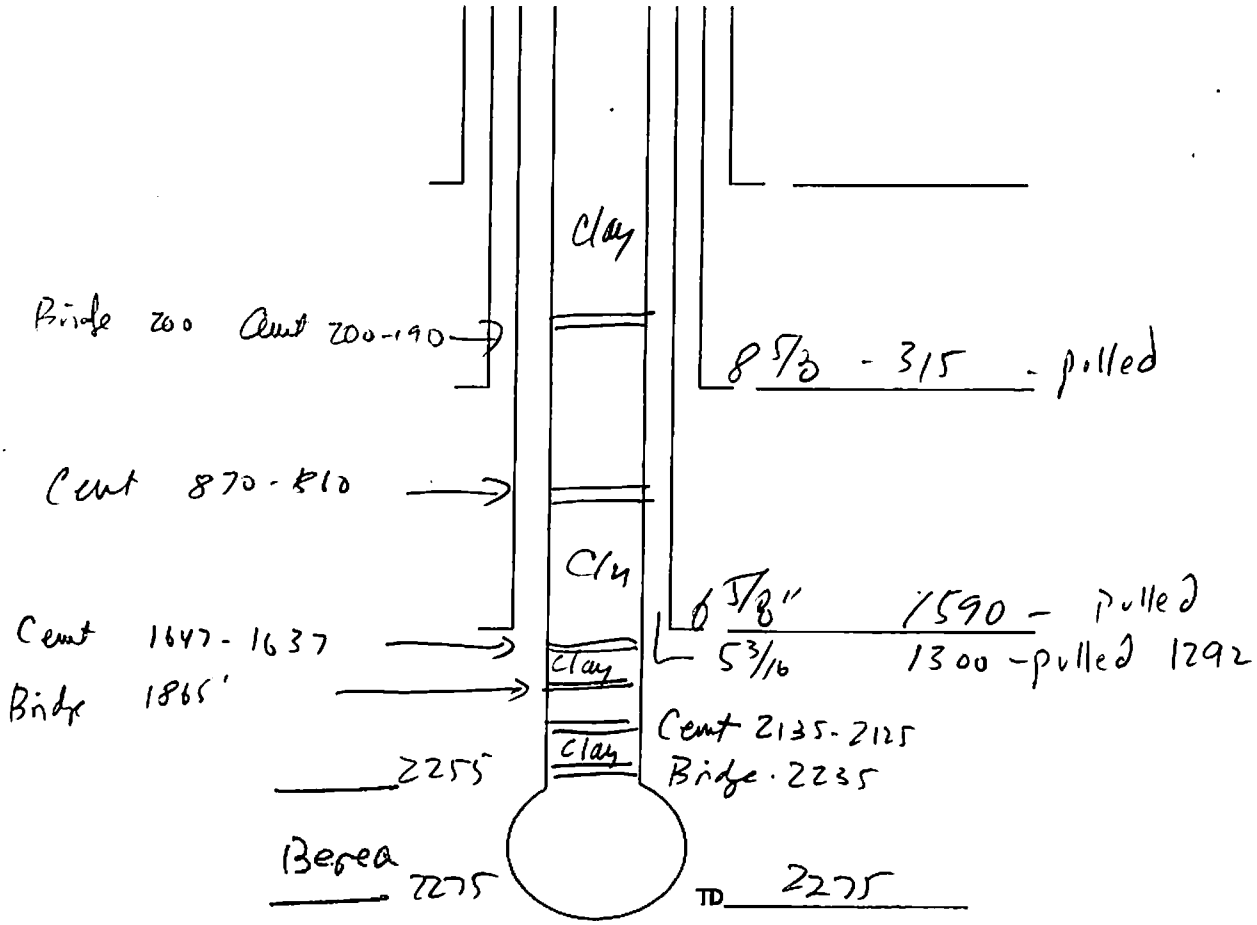
My commission expires: Apr 1, 1957

Permit No. LIN-444

Fay Bowling #1 (JE map)

Griffithsville Unit #2 Field

47-043- 30444



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

(42)

AOR - Well Review Checklist

API Number: 47- 043 - 30445 Area Permit Number: 2R AP

Operator Name: H 6 Energy

Operator's Well #: 2

Farm Name: Fay Bowling (JE May)

Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐

Well Status: Active ☐ Abandoned ☐ Plugged ☒

TD of well: 2418

Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐

Easting: 416,186 Northing: 4,233,450

Elevation: 280

Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☐

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**

Bottom Hole Injection Pressure **0**

Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:

Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

DG-10

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

47-043-30445

WELL RECORD

Oil or Gas Well Oil (KIND)

Permit No. _____ ABANDONMENT

Company UNITED FUEL GAS CO.
Address P.O. Box 1273, Charleston 25, W. Va.
Farm J. E. May Acres 40½
Location (waters) Bear Fk.
Well No. 2 Elev. 903.2
District Duval County Lincoln
The surface of tract is owned in fee by
Address
Mineral rights are owned by John D. May, et al
1032 - 7th Avenue Address Huntington, W. Va.
Drilling commenced 11-5-08
Drilling completed 12-24-08
Date Shot 12-29-08 From To
With 2-23-11 90 Qts. & 90 Qts.
Open Flow /10ths Water in Inch
/10ths Merc. in Inch
Volume Cu. Ft.
Rock Pressure lbs. hrs.
Oil 35 bbls., 1st 24 hrs.
Fresh water feet feet
Salt water feet feet

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Packer
16			
13			Size of
10			
8¼			
6¾	1746'	1746'	Depth set
5 3/16			
3			Perf. top
2			Perf. bottom
Liners Used			Perf. top
			Perf. bottom

CASING CEMENTED SIZE No. Ft. Date

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

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks
Salt Sand			1030	1685			
Little Lime			1698	1739			
Pencil Cave			1739	1741			
Big Lime			1741	1914			
Injun Sand			1914	1969			
Brown Shale			2375	2397			
Berea			2397	2418			
Total Depth:				2418'			

JUN 1948
WEST VIRGINIA
DEPARTMENT OF MINES

FORM OG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

47-043-30445

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE. ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

LEASE OR PROPERTY OWNER

ADDRESS

UNITED FUEL GAS COMPANY
WELL OPERATOR
% G. H. Moore
P.O. Box 1273, Charleston, W. Va.
COMPLETE ADDRESS

July 22, 1948

WELL AND LOCATION

Duval District

Lincoln County

Well No. 2

J. E. May Farm

STATE INSPECTOR SUPERVISING PLUGGING D. E. Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

H. J. Woodall and J. A. Woodall

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 R. H. Adkins, well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 3rd. day of July, 19 48, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD	FILLING MATERIAL			PLUGS USED	CASING	
FORMATION	CONTENT	FROM	TO	SIZE & KIND	CSG PULLED	CSG LEFT IN
	Bridged at	2377'		2"	2428'	none
	Mud & Clay	2377'	2277'	7"	1743' 6"	none
	Cement	2277'	2267'			
	Bridged at	1999'				
	Mud & Clay	1999'	1721'			
	Cement	1721'	1711'			
	Mud & Clay	1711'	1010'			
	Cement	1010'	1000'			
	Bridged at	200'				
	Cement	200'	190'			
	Mud & Clay	190'	0			

COAL SEAMS
(NAME)
(NAME)
(NAME)
(NAME)

DESCRIPTION OF MONUMENT
Monument erected 18"X18"x30"
Inscription on monument - U.F.G.Co.
J.E.May Well #2- Abn. 7-21-48

and that the work of plugging and filling said well was completed on the 21st. day of July, 19 48.

And further deponents saith not.

H. J. Woodall
J. A. Woodall

Sworn to and subscribed before me this 22 day of July, 19 48

Notary Public.

My commission expires:
Feb 21 1949

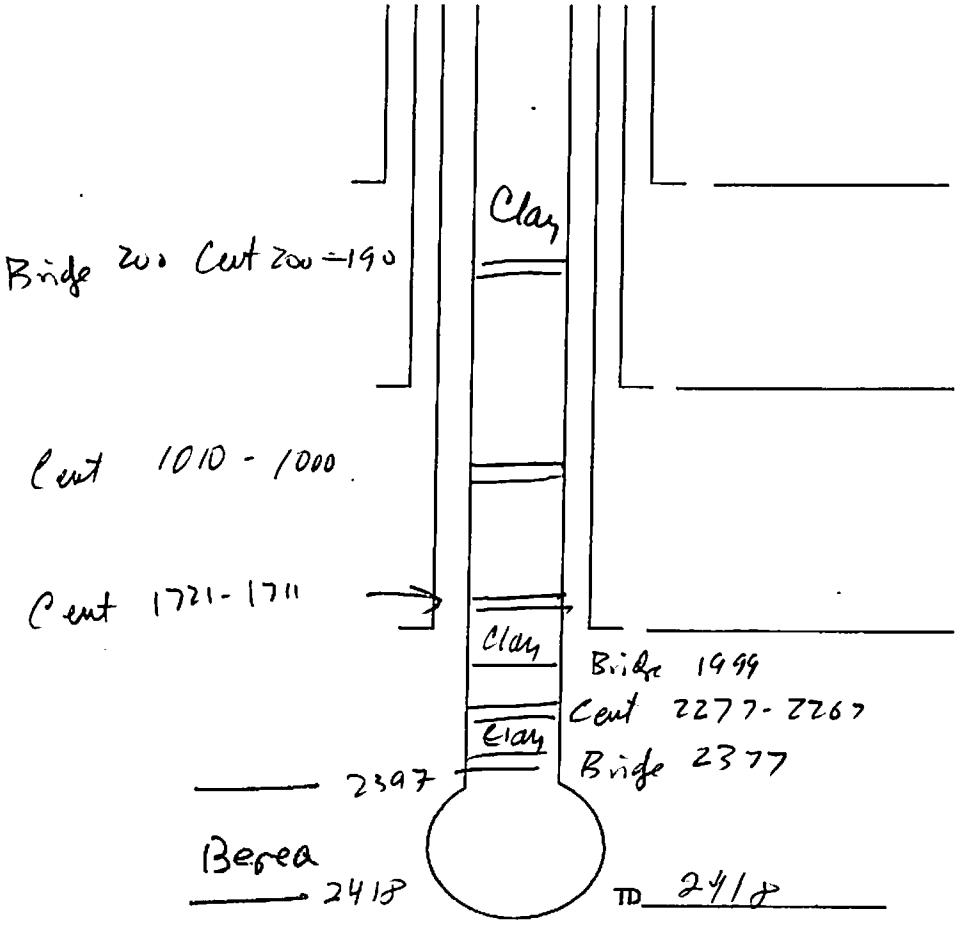
Permit No. 445

JACKETT PRINTING COMPANY, CHARLESTON, W. VA.

Fay Bolings #2 (JE May)

Griffithsville Unit #2 Field

47-043- 30445



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

(44)

AOR - Well Review Checklist

API Number: 47- 043 - 30449 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 3
Farm Name: Fay Bowling (TE May)
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2299
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 416,345 Northing: 4,233,222
Elevation: 238
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:
Date Reviewed:

** Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

08-10

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

47-043-30449

WELL RECORD

Oil or Gas Well 011 (KIND)

Permit No. _____ Abandonment

Company UNITED FUEL GAS CO.,
Address P.O. Box 1273, Charleston 25, W. Va.
Farm J. E. May Acres 40½
Location (waters) Bear Fork
Well No. 3 Elev. 813.2
District Duval County Lincoln
The surface of tract is owned in fee by
Address
Mineral rights are owned by John D. May, et al
1032 - 7th Avenue Address Huntington, W. Va.
Drilling commenced 1-4-09
Drilling completed 2-16-09
Date Shot 2-17-09 From To
With 90 Qts.
Open Flow /10ths Water in Inch
/10ths Merc. in Inch
Volume Cu. Ft.
Rock Pressure lbs. hrs.
Oil 35 bbls., 1st 24 hrs.
Fresh water feet feet
Salt water feet feet

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Packer
16			
13			Size of
10			
8¼	1605'	1605'	Depth set
6⅝			
5 3/16			Perf. top
3			Perf. bottom
2			Perf. top
Liners Used			Perf. bottom

CASING CEMENTED SIZE No. Ft. Date

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

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks
Salt Sand			920	1550			
Little Lime			1550	1590			
Pencil Cave			1590	1595			
Big Lime			1595	1795			
Injun Sand			1795	1858			
Brown Shale			2255	2279			
Berea			2279	2299			
Total Depth:				2299'			

JUN 1948
WEST VIRGINIA
DEPARTMENT OF MINES

FORM OG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

47-043 -30449

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

John D. May Et Al.
LEASE OR PROPERTY OWNER

1032-7 Ave. Huntington, W. Va.
ADDRESS

United Fuel Gas Company
NAME OF WELL OPERATOR

Charleston, West Virginia
COMPLETE ADDRESS

August 28, 19 48
WELL AND LOCATION

Duval District

Lincoln County

Well No. 3

J. E. May Farm

STATE INSPECTOR SUPERVISING PLUGGING D. E. Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

W. C. Pack and Hubert Behaler 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 Pack Plugging Company, well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 1st day of August, 19 48, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD — FORMATION	FILLING MATERIAL — CONTENT	FROM	TO	PLUGS USED — SIZE & KIND	CASING — CSG PULLED	CSG LEFT IN
	Bridge	2259		2" Tubing	2293	
	Clay	2259	2159			
	Cement Plug	2159	2149		6 5/8"	
	Bridge	1888			1590	
	Clay	1888	1635	30' Below Pipe		
	Cement Plug	1635	1625			
	Clay	1625	920			
	Cement	920	910			
	Bridge	200				
	Cement Plug	200	190			
	Clay	190	0			

COAL SEAMS

(NAME)
(NAME)
(NAME)
(NAME)

DESCRIPTION OF MONUMENT

U.E.G. Co.
J. E. May No. 3
Abandonment 8-12-48

and that the work of plugging and filling said well was completed on the 12th day of August, 19 48.

And further deponents saith not.

W C Pack
Hubert Behaler

Sworn to and subscribed before me this 28th day of August, 19 48.

Notary Public.

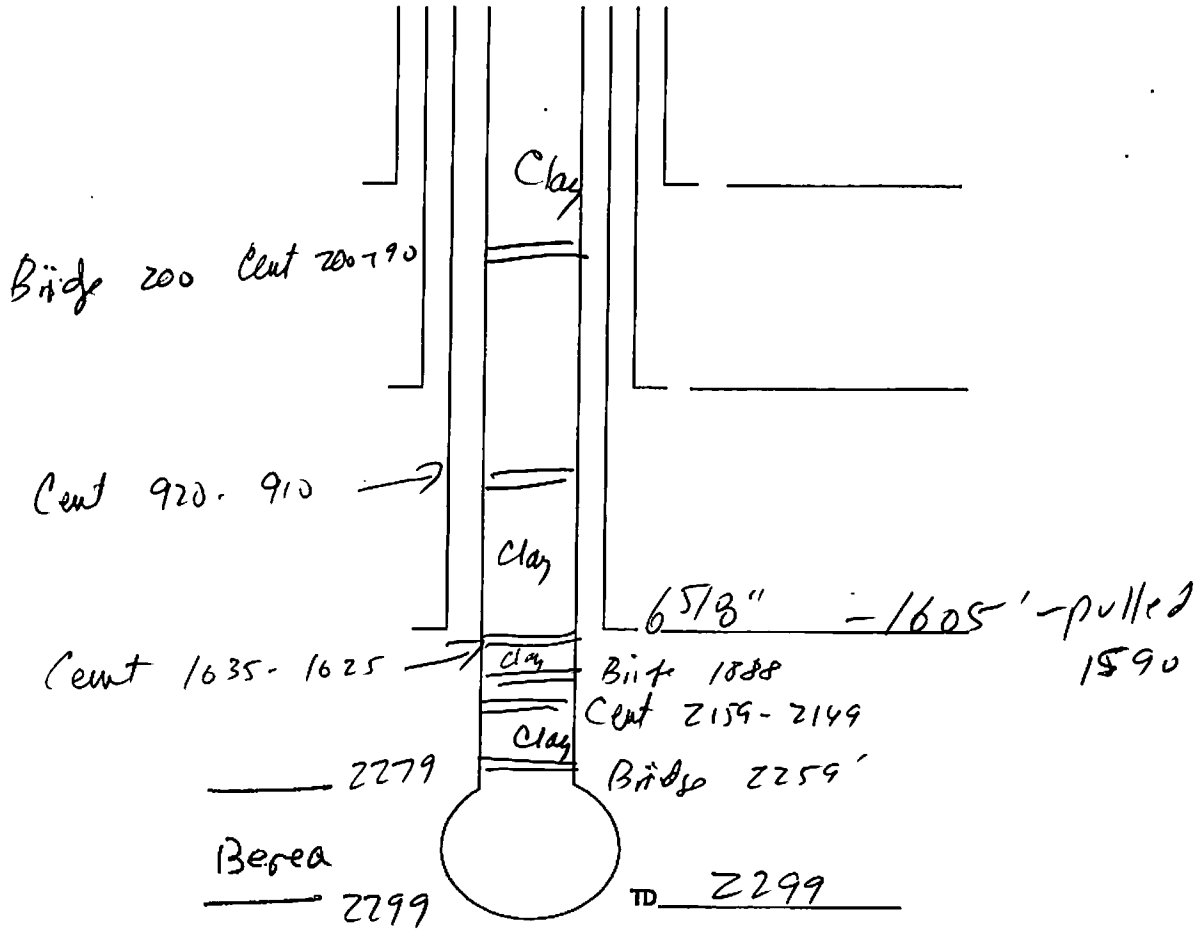
My commission expires:
Feb. 21, 1949

Permit No. Lin-446

Fay Bollins 3 (JE May)

Griffithsville Unit #2 Field

47-043- 30 449



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

(45)

AOR - Well Review Checklist

API Number: 47- 043 - 30228 Area Permit Number: 2R AP

Operator Name: H 6 Energy

Operator's Well #: 4

Farm Name: Fay Bowling (ET al)

Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐

Well Status: Active ☐ Abandoned ☐ Plugged ☒

TD of well: 2337

Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐

Easting: 416,213 Northing: 4,233,050

Elevation: 251

Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☐

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**

Bottom Hole Injection Pressure **0**

Hydrostatic Pressure **0**

Comments:

38 NA

Reviewer Name: Signature:

Date Reviewed:

** Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

RECORD of Well No. 7 on Jno. Conley Farm Acres

Field, District J County

Rig Commenced 19 , Completed 19

Drilling Commenced April 8 1912, Completed June 13 1912

Cost per foot, 1¼ Contractor Hawkey & Summerville Address, Hawkey, W. Va.

Drillers' Names Herman Leonard & Guy Sanders

CONDUCTOR AND CASING USED IN DRILLING

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅝ Inch	6¼ Inch	6¼ Inch	5⅛ Inch	5 3-16 Inch	4½ Inch
				225'		335' Hole				

CONDUCTOR AND CASING LEFT IN WELL

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅝ Inch	6¼ Inch	6¼ Inch	5⅛ Inch	5 3-16 Inch	4½ Inch
		16				335' Hole				

OIL WELL					GAS WELL					
When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods		Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure
6/14/12	80 qts									

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Slate	16	66	50	El=837.5
Sand	66	140	74	335' 10" hole
Slate	140	191	51	
Sand	191	280	89	
Coal	280	283	3	
Sand	283	403	120	Big Water 1130'
Slate	403	543	140	
Sand	543	603	60	
Slate	603	693	90	
Sand	693	753	60	
Slate	753	803	50	
Sand	803	898	95	
Slate	898	955	57	
Salt sand	955	1505	550	
Water "	1505	1580	75	
Slate	1580	1590	10	
Little Lime	1590	1625	35	
Big Lime	1625	1815	190	
" Injun	1815	1865	50	
Slate	1865	1950	85	
Shells	1950	2100	150	
Slate	2100	2297	197	
B. Shale	2297	2317	20	
B. Grit	2317	2337	20	

RECEIVED
APR 30 1926

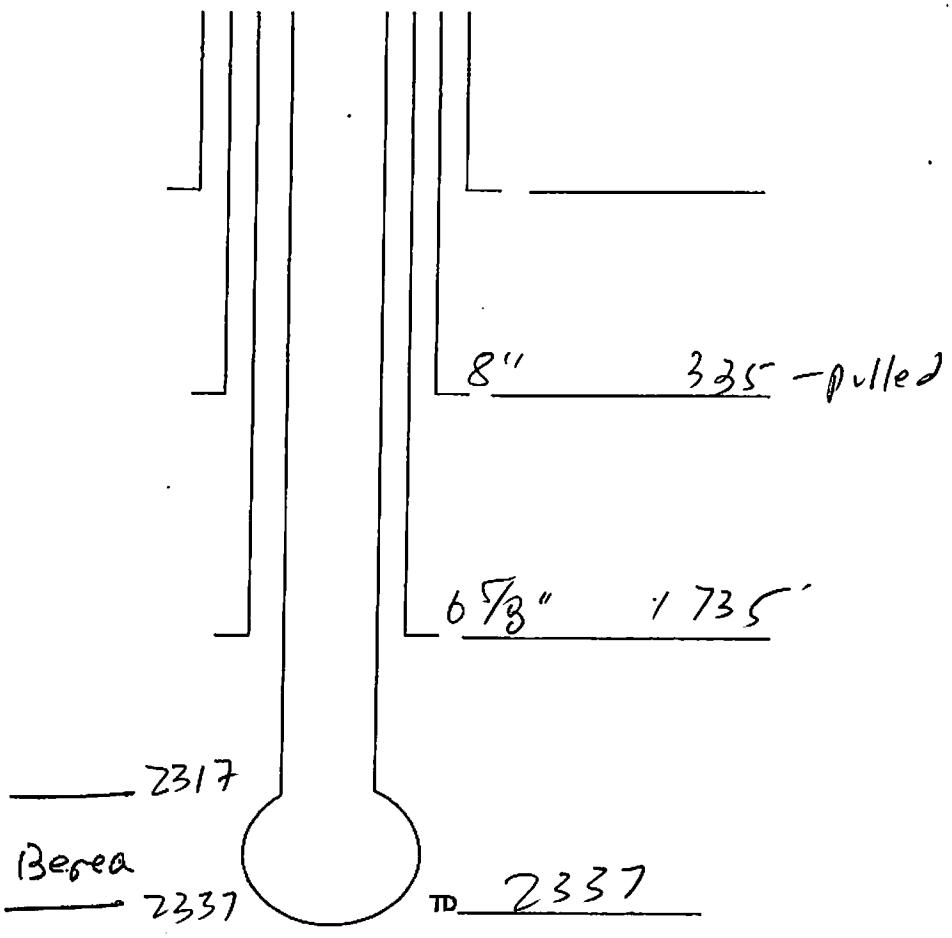
Wrong entry. It was well #6 that was abandoned on this date. See other Big Creek book.

47-043-3022

Fay Bowlin 4 (EJ may)

Griffithsville Unit #2 Field

47-043- 30228



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

(46)

AOR - Well Review Checklist

API Number: 47- 043 - 30450 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 5
Farm Name: Fay Bowling (JE May)
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2530
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 416,292 Northing: 4,233,577
Elevation: 315
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = 0
Bottom Hole Injection Pressure 0
Hydrostatic Pressure 0

Comments:

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

WELL RECORD

47-043-3045

Oil or Gas Well Oil (KIND)

ABANDONMENT

Permit No.

Company UNITED FUEL GAS CO.
Address P.O. Box 1273, Charleston 25, W. Va.
Farm J. E. May Acres 40½-A
Location (waters) Branch of Bear Fork
Well No. 5 Elev. 1023.3
District Duval County Lincoln
The surface of tract is owned in fee by
Address
Mineral rights are owned by John D. May, et al
1032-7th Avenue Address Huntington, W. Va.
Drilling commenced 7-17-09
Drilling completed 9-6-09
Date Shot 9-7-09 From To
With 1-12-11 90 Qts. & 210 Qts.
Open Flow /10ths Water in Inch
/10ths Merc. in Inch
Volume Cu. Ft.
Rock Pressure lbs. hrs.
Oil 30 bbls., 1st 24 hrs.
Fresh water feet feet
Salt water feet feet

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Packer
16			
13			Size of
10			
8¼	1832'	1832'	Depth set
6⅝			
5 3/16			Perf. top
3			Perf. bottom
2			Perf. top
Liners Used			Perf. bottom

CASING CEMENTED SIZE No. Ft. Date

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

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks
Salt Sand			1170	1781			
Little Lime			1781	1820			
Pencil Cave			1820	1826			
Big Lime			1826	2006			
Injun Sand			2006	2065			
Brown Shale			-	-			
Berea Sand			2508	2530			
Total Depth:			2530'				

JUN 1948
WEST VIRGINIA DEPARTMENT OF MINES

FORM OG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

47-043-30450

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER — ADDRESS

COAL OPERATOR OR OWNER — ADDRESS

LEASE OR PROPERTY OWNER — ADDRESS

UNITED FUEL GAS COMPANY
% G. Hamm Moore, OPERATOR
P.O. Box 1273, Charleston 25, W.Va.
COMPLETE ADDRESS

July 22, 1948 19

WELL AND LOCATION

Duval District
Lincoln County
Well No. 5
J. E. May Farm

STATE INSPECTOR SUPERVISING PLUGGING D. E. Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

H. J. Woodall and J. A. Woodall 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 R. H. Adkins, well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 24th day of June, 19 48, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD — FORMATION	FILLING MATERIAL — CONTENT	FROM	TO	PLUGS USED — SIZE & KIND	CASING — CSG PULLED	CSG LEFT IN
	Hole collapsed and filled			2"	1807'9"	596'
	To	1852'		7"	1843'0"	none
	Mud & Clay	1852'	1800'			
	Cement	1600'	1790'			
	Mud & Clay	1790'	1150'			
	Cement	1150'	1140'			
	Bridged at	200'				
	Cement	200'	190'			
	Mud & Clay	190'	0			

COAL SEAMS
(NAME)
(NAME)
(NAME)
(NAME)

DESCRIPTION OF MONUMENT
Monument erected 30" above surface, 18" X 18"- Inscription on monument - U.F.G.Co. Well #5- J.E.May Abn. 7-2-48

RECEIVED AUG 1948 WEST VIRGINIA DEPARTMENT OF MINES

and that the work of plugging and filling said well was completed on the 2nd. day of July, 19 48.

And further deponents saith not.

H. J. Woodall
J. A. Woodall

Sworn to and subscribed before me this 22 day of July, 1948

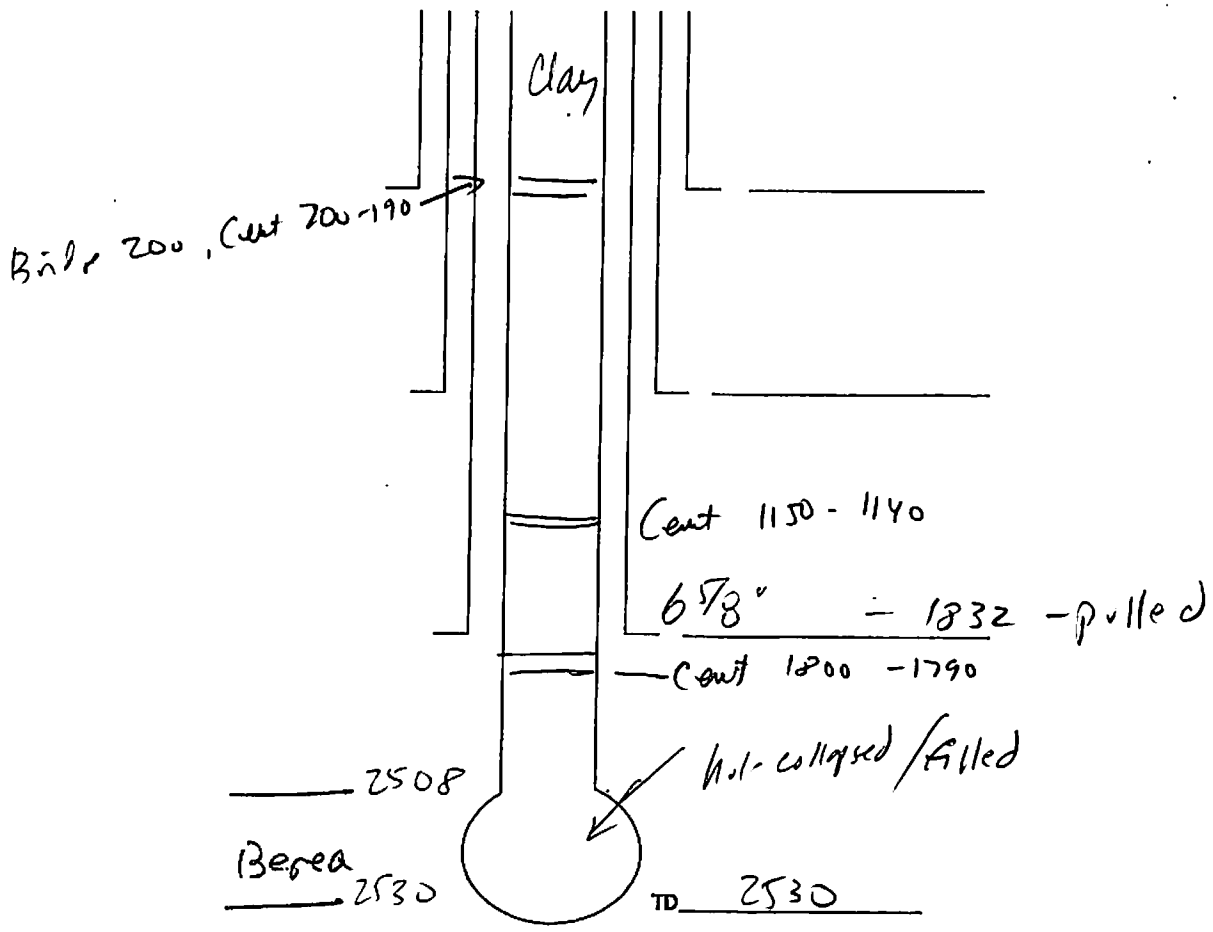
Notary Public.

Permit No. 14-450

F Bowling 5 (JE Wray)

Griffithsville Unit #2 Field

47-043-30450



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

(47)

AOR - Well Review Checklist

API Number: 47- 043 - Area Permit Number: 2R AP

Operator Name: H 6 Energy

Operator's Well #: 6

Farm Name: Ivy Bowling

Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐

Well Status: Active ☐ Abandoned ☐ Plugged ☒

TD of well:

Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐

Easting: 416,542 Northing: 4,233,186

Elevation: 287

Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☐

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**

Bottom Hole Injection Pressure **0**

Hydrostatic Pressure **0**

Comments:

38 API
✓
N/A

Reviewer Name: Signature:

Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

RECORD of Well No. 6 on Yale Mary Farm Acres

Field, District County,

Rig Commenced 19 . . Completed 19

Drilling Commenced Aug 31 1911 Completed Oct 9 1911

Cost per foot, 1.15 Contractor, Hacker & Hinman Oil Co. Address, Yarnell, W.Va.

Drillers' Names, N. L. Lemaire & Guy London

CONDUCTOR AND CASING USED IN DRILLING.

Conductor	13 inch	10 inch	8¼ inch	8 inch	7¼ inch	6¼ inch	6¼ inch	5¼ inch	5 inch	4¼ inch
14				350		1735'				

CONDUCTOR AND CASING LEFT IN WELL.

Conductor	13 inch	10 inch	8¼ inch	8 inch	7¼ inch	6¼ inch	6¼ inch	5¼ inch	5 inch	4¼ inch
14						1735'				

OIL WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods
10/10/11	60 qts	Shot 7-25/14-120 qts		

GAS WELL

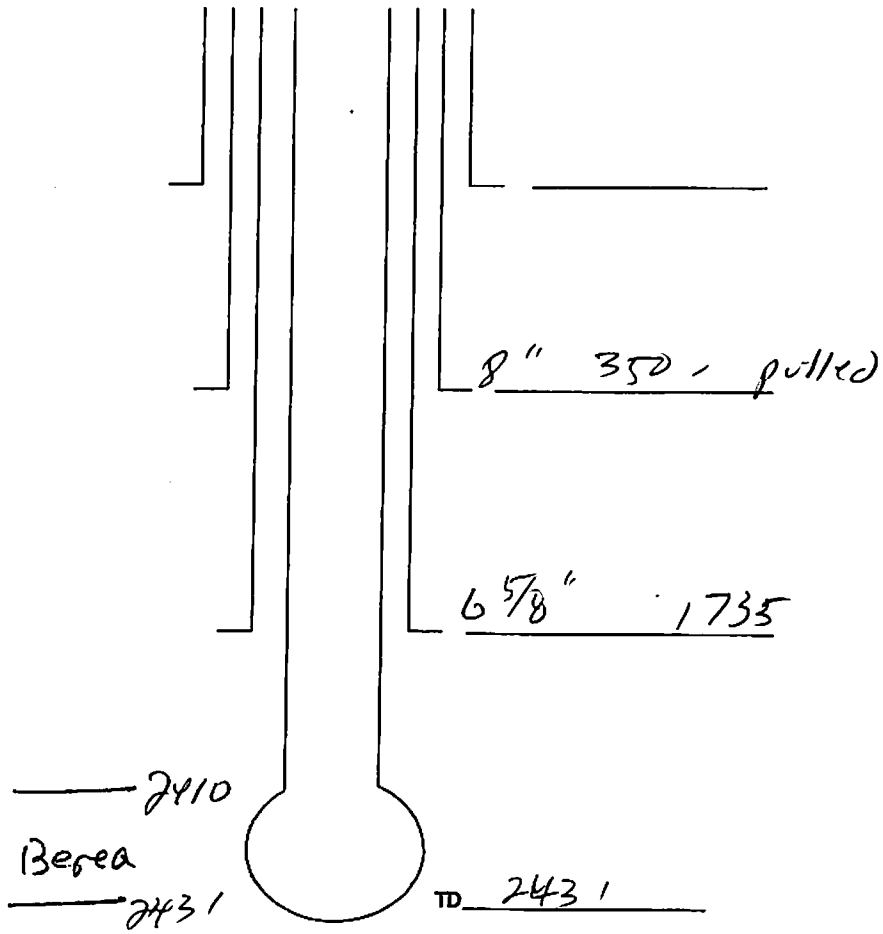
Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Mud		14	14	Cased 10' in Big Lime
Slate	14	94	80	
Sand	94	114	20	El= 9
Slate	114	185	71	
Sand	185	310	125	Abd 4-30-26
Slate	310	390	80	
Sand	390	750	360	
Slate	750	760	10	
Sand	760	980	220	
Slate	980	1040	60	
Salt Sand	1040	1553	513	
Slate	1553	1588	35	Hole filled w. Water at 1110'
Maxon Sand	1588	1688	100	
Little Lime	1688	1718	30	
Pencil Cave	1718	1725	7	
Big Lime	1725	1910	185	
Big Injun	1910	1965	55	
Slate	1965	2060	95	
Shells	2060	2185	125	
Slate	2185	2385	200	
Black Shale	2385	2410	25	
Rona Sand	2410	2431	21	

Fay Bowling 6 (Jot may)

Griffithsville Unit #2 Field

47-043-



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

(48)

AOR - Well Review Checklist

API Number: 47- 043 - 30451 Area Permit Number: 2R AP

Operator Name: H 6 Energy

Operator's Well #: 7

Farm Name: Jay Bowling (Te may)

Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐

Well Status: Active ☐ Abandoned ☐ Plugged ☒

TD of well: 2330

Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐

Easting: 416,558 Northing: 4,233,754

Elevation: 255

Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = 0

Bottom Hole Injection Pressure 0

Hydrostatic Pressure 0

Comments:

Reviewer Name: Signature:

Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

Record of Well No. 1 on J. C. Irwin Farm Acres Unknown

Mile. Field. Duvall District Lincoln County.

Rig Commenced ..... 19..., Completed ..... 19...

Drilling Commenced May 14th 1909. Completed July 2nd 1909.

Cost per foot, 1st Contractor, Weller Bros. Address, Glenville, W. Va.

Drillers' Names, Jas. Bolton and Silas Edgell.

CONDUCTOR AND CASING USED IN DRILLING.

Conductor	12 Inch	10 Inch	8¼ Inch	8 Inch	7¼ Inch	6¼ Inch	6¼ Inch	5⅛ Inch	5 3-16 Inch	4¼ Inch
8				300		1687				

CONDUCTOR AND CASING LEFT IN WELL.

Conductor	12 Inch	10 Inch	8¼ Inch	8 Inch	7¼ Inch	6¼ Inch	6¼ Inch	5⅛ Inch	5 3-16 Inch	4¼ Inch
8		[redacted]				1687 pulled				

OIL WELL GAS WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods		Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure
7/31/09	4 by 60	2nd Shot	2" 3/4	240 of 8.						

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Soil		8	8	Hole filled with 315'
Sand	8	90	82	Hole filled with salt
Slate	90	130	40	Sand water 975'
Sand	130	180	50	
Sand & Shale	180	190	10	Casing found at 1637'
Slate	190	210	20	Pulled & measured to
Sand	210	244	34	1687 ft water standing
Slate	244	270	26	in.
Coal	270	275	5	
Sand & Slate	275	400	125	Show gas in Sand
Slate	400	433	33	at 1930'
Coal	433	439	6	
Sand & Lime	439	510	71	
Lime	510	535	25	
Sand	535	610	75	
Slate	610	645	35	
Coal	645	660	15	
Sand	660	772	112	
Slate	772	810	38	
Sand	810	914	104	
Lime	914	925	11	
Salt Sand	925	1580	655	
Black Lime	1580	1625	45	
Berea Sand	1625	1630	5	
White Lime	1630	1800	170	
Brown Sand	1800	1865	65	
Pencil Cave - Maxton	1865	2288	423	
Brown Shale	2288	2308	20	
Berea Sand	2308	2329	21	
Bottom Hole	2330			

Abandoned Dec. 13 1940.

47-043-30451

FORM OG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

47-043-30451

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE. ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

None
COAL OPERATOR OR OWNER

ADDRESS

LEASE OR PROPERTY OWNER

ADDRESS

United Fuel Gas Company
NAME OF WELL OPERATOR

Charleston, W.Va.
COMPLETE ADDRESS

August 3 19 48
WELL AND LOCATION

Duvall District

Lincoln County

Well No. 7

J.E.May Farm

STATE INSPECTOR SUPERVISING PLUGGING D.E.Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

Wally Price and L. M. Pack 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 Pack Plugging Co., well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 24 day of July, 19 48, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD	FILLING MATERIAL			PLUGS USED	CASING	
FORMATION	CONTENT	FROM	TO	SIZE & KIND	CSG PULLED	CSG LEFT IN
	Bridged	2297				
	Mud Clay	2297	2397			
	Cement Plug	2397	2507			
	Bridged	1895				
	Mud Clay	1895	1654	30 'Below Pipe		
	Cement Plug	1654	1644			
	Mud Clay	1644	935			
	Cement Plug	935	925			
	Bridge	800				
	Cement Plug	200	190			
	Clay Fill	190	0			

COAL SEAMS

(NAME)
(NAME)
(NAME)
(NAME)

DESCRIPTION OF MONUMENT

Monument Erected 18 x 18 x 30
Inscription J.E.May No.7
Abn. 7-21-48

AUG 1948
WEST VIRGINIA
DEPARTMENT OF MINES

and that the work of plugging and filling said well was completed on the 31st day of July, 19 48.

And further deponents saith not.

Wally Price
L M Pack

Sworn to and subscribed before me this 3 day of Aug., 19 48

Notary Public.

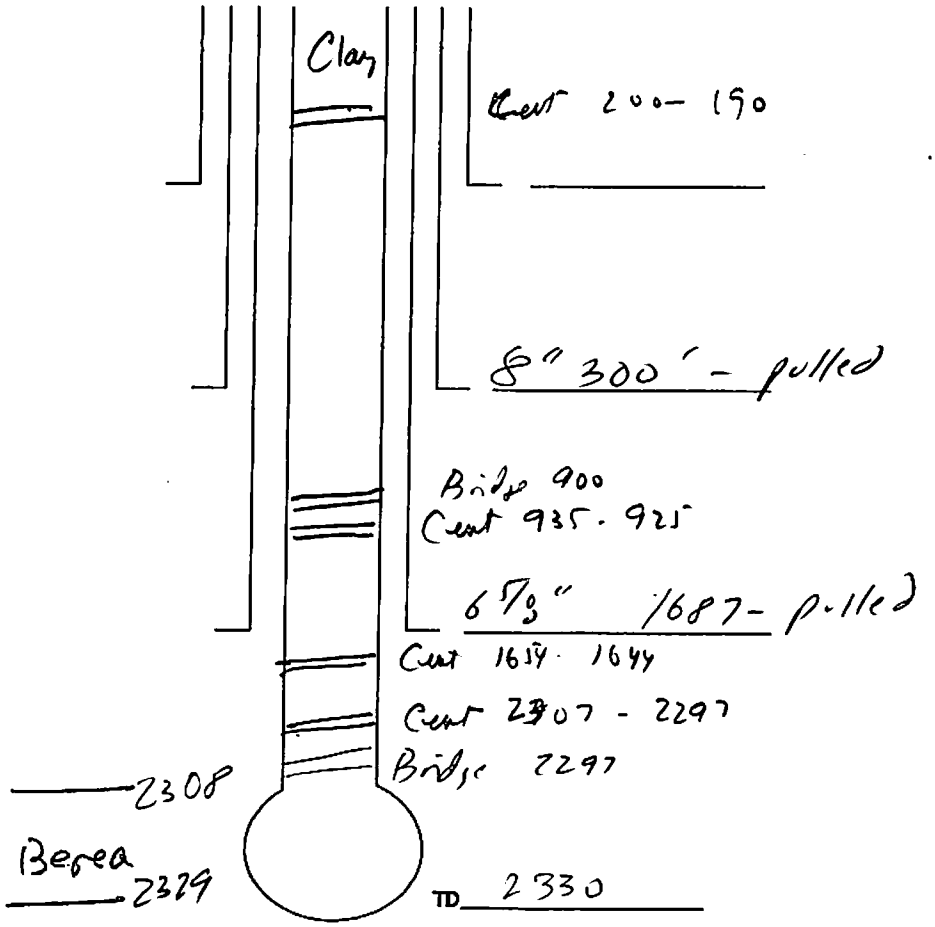
My commission expires:
Fe. 21 1949

Permit No. Lin 451

Fay Bowling #7

Griffithsville Unit #2 Field

47-043- 30451



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

(49)

AOR - Well Review Checklist

API Number: 47- 043 - 30256 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 8
Farm Name: Ray Bowling (Jeremy)
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2340
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 416,440 Northing: 4,233,456
Elevation: 752
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = 0
Bottom Hole Injection Pressure 0
Hydrostatic Pressure 0

Comments:

Reviewer Name: Signature:
Date Reviewed:

** Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

WELL RECORD

Oil or Gas Well OIL (Kind)

Permit No.

Company SOUTH PENN NATURAL GAS COMPANY
Address Union Trust Bldg., Parkersburg, W. Va.
Farm J. E. May Acres 61
Location (waters) Branch of Bear Fork
Well No. 8 Elev. 833.85
District Duval County Lincoln
The surface of tract is owned in fee by W. L. Foulkes
Address Yawkey, W. Va.
Mineral rights are owned by Royse C. May, et al.
Address 402½ Lee Street
Drilling commenced May 29, 1914 Charleston, W. Va.
Drilling completed July 7, 1914
Date shot July 10, 1914 Depth of shot ?
Open Flow /10ths Water in - Inch
/10ths Merc. in - Inch
Volume - Cu. Ft.
Rock Pressure - lbs. hrs.
Oil - bbls., 1st 24 hrs.
Fresh water 130' feet [illegible] feet
Salt water 1025' feet feet

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			
16			Kind of Packer
13			
10			Size of
8¼			
6⅝	1660'	1660'	Depth set
5 3/16			
3			Perf. top
2			Perf. bottom
Liners Used			Perf. top
Conductor	13		Perf. bottom

CASING CEMENTED - SIZE No. Ft. Date

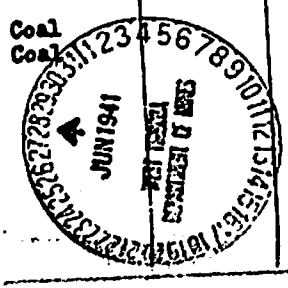
COAL WAS ENCOUNTERED AT NONE FEET -See note below INCHES
FEET INCHES FEET INCHES
FEET INCHES FEET INCHES

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks
				13			
Soil			13	120			
Slate			120	180	Water	130	
Sand			180	300			
Slate			300	320			
Sand			320	900			
Slate & Shells			900	980			
Sand			980	990			
Slate			990	1575	Water	1025	
Salt Sand			1575	1610			
Maxon Sand			1610	1650	1660'-6 5/4"		
Black Lime			1650	1655			
Pencil Cave			1655	1835			
White Lime			1835	1905			
Big Injun			1905	2299			
Slate & Shells			2299	2319			
Brown Shale			2319	2340			
Berea Grit							
				2340			
Total Depth							

NOTE:

Well record indicates no coal, but Field Work Order shows coal at following depths.

Coal	447	453
Coal	284	289



(Over)

30256

FORM OG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

W. L. Foulkes — (If any) COAL OPERATOR OR OWNER
Yawkey, W. Va. — ADDRESS
COAL OPERATOR OR OWNER
ADDRESS
(Same as above) — LEASE OR PROPERTY OWNER
ADDRESS

SOUTH PENN NATURAL GAS COMPANY, — NAME OF WELL OPERATOR
Union Trust Building, Parkersburg, W.Va., — COMPLETE ADDRESS
February 2, 1942. — WELL AND LOCATION
Duval — District
Lincoln — County
Well No. 8
J. E. May — Farm

STATE INSPECTOR SUPERVISING PLUGGING None

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

Rex Mason and Arlie Satterfield 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 South Penn Natural Gas Co., well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 6th day of August, 1941, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD		FILLING MATERIAL		PLUGS USED	CASING	
FORMATION	CONTENT	FROM	TO	SIZE & KIND	CSG PULLED	CSG LEFT IN
Berea	Clay	2340	2299			
	Cement	2299	2289			
Permanent Bridge	at	1935				
Big Injun	Clay	1935	1660	6-5/8"-1660'		---
Big Lime	Clay	1660	1635			
	Cement	1635	1625			
Little Lime	Clay	1625	1590			
	Cement	1590	1580			
Salt Sand	Clay	1580	970			
	Cement	970	960			
Permanent Bridge	at	483				
	Clay	427	318			
	Clay	264	to surface			

COAL SEAMS				DESCRIPTION OF MONUMENT
(NAME) No Name	Cement	483	427	8-1/4" csg.ext.3' above surface,
(NAME) No Name	Cement	318	264	filled with concrete. Inscribed
(NAME)				on top - S.P.N.G.Co.-J.E.May
(NAME)				#8 - Abd. 8-27-41

and that the work of plugging and filling said well was completed on the 27th day of August, 1941.

And further deponents saith not.

Rex Mason
Arlie Satterfield

Sworn to and subscribed before me this 13 day of February, 1942.

H. Smith
Notary Public.

My commission expires: Dec. 7-1947

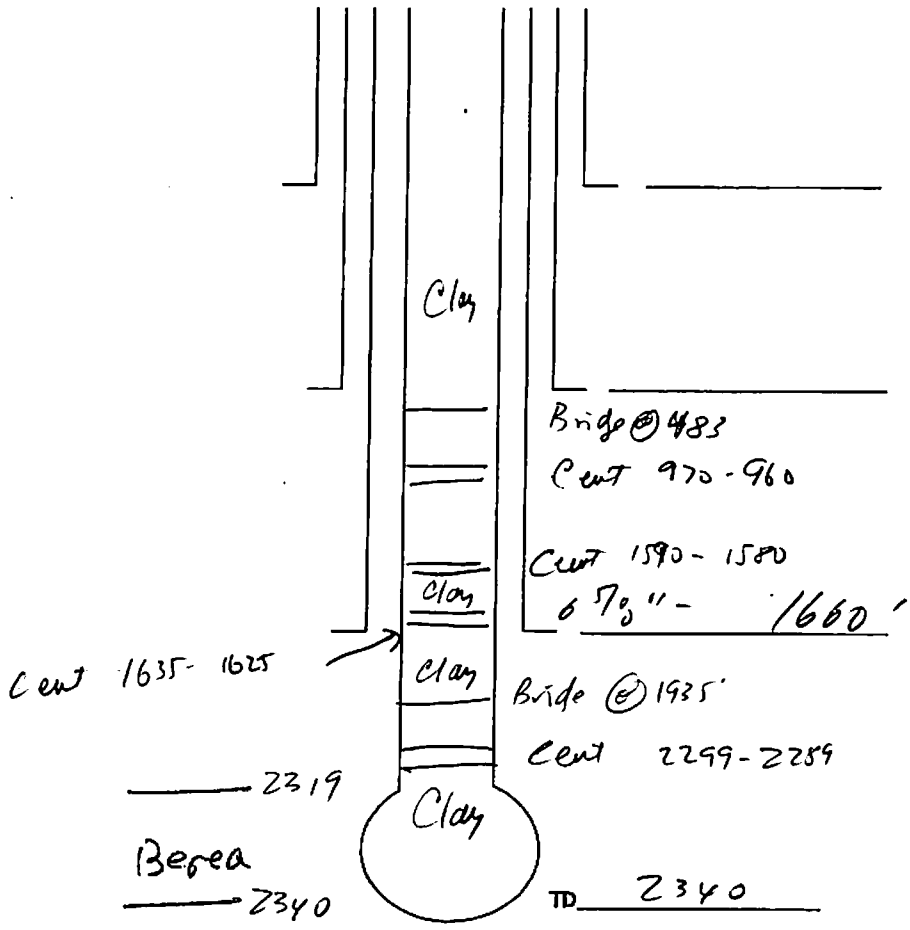
Permit No. LIN-256

FEB 1942

Fay Bowl rig 8 (JE may).

Griffithsville Unit #2 Field

47-043- 30256



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

(50)

AOR - Well Review Checklist

API Number: 47- 043 -
Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 9
Farm Name: Fay Bowling
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well:
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 416,475 Northing: 4,233,648
Elevation: 246
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☐

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

35 38 A'I
NA

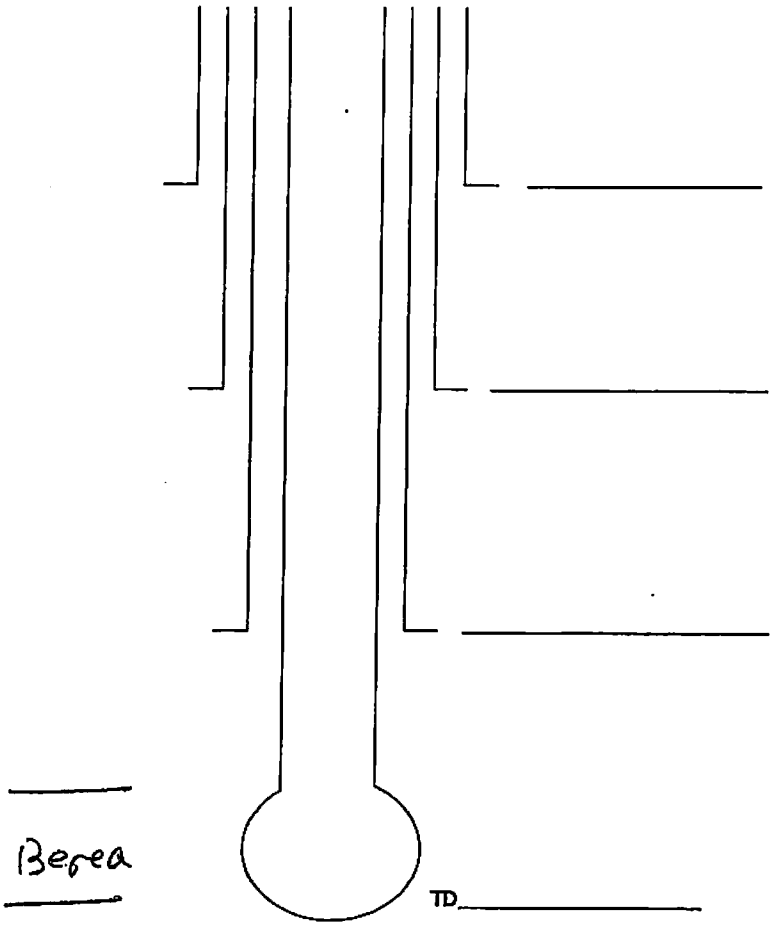
Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

Fay Bowling 9

Griffithsville Unit #2 Field

47-043-



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

51

AOR - Well Review Checklist

API Number: 47- 043 - 02224 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: #1
Farm Name: JS Burdette
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2334
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 417,042 Northing: 4,236,309
Elevation: 256
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = 0
Bottom Hole Injection Pressure 0
Hydrostatic Pressure 0

Comments:

Reviewer Name: Signature:
Date Reviewed:

** Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-0 2224

Lin-2224

SOUTH PENN OIL COMPANY—COMPLETION

SERIAL No _____ FARM J, S. Burdette WELL No. 1

ELEVATION _____ N _____ S. 77 E. _____ W. 76

LEASE No. _____ ACRES 85

WATERS OF Trace Fork

DISTRICT Duval COUNTY Lincoln STATE W. Va

DRILLING COMMENCED 2-18-1913 COMPLETED 4-2-1913 DEPTH 2339

SANDS	TOP	BOTTOM	ELEV. TOP	CASING	
PGH. COAL OR BIG LIME					
Big Lime	1628	1810		6 5/8	1643
" Injun	1810	1840			
Berea	2319	2334			
				PACKERS AND DEPTH SET	

INITIAL PROD. No Record SAND Berea DEPTH No Record

GAS TEST _____ " _____ "

SHOT 3-6-1914 QUARTS 60 " _____ "

REMARKS Eddystone Purchase

FREEMAN DISTRICT

REPORTED BY _____ ABANDONED _____

F. O. 534-5M-10-21

47-043-02224

WR-35
14-May-99

API # 47-43-02224-P

STATE OF WEST VIRGINIA
DIVISION OF ENVIRONMENTAL PROTECTION
SECTION 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: Mosteller, Dennis Jr Operator Well No.: JS Burdette # 1
LOCATION: Elevation: 939.00 Quadrangle: Garretts Bend
District: Duval County: Lincoln
Latitude: 7550 Feet South of 38 Deg. 17 Min. 30 Sec.
Longitude 9100 Feet West of 81 Deg. 55 Min. 0 Sec.

Office of Oil & Gas Plugging
AUG 26 1999
WV Division of Environmental Protection

Well Type: Oil. X GAS

Company: S.L. Meadows, Jr. Production, Inc.
ROUTE 2 BOX 22
RAVENSWOOD, WV 26164
Coal Operator or owner: N/A

Agent: S.L. Meadows, Jr.
Coal Operator or owner: N/A

Permit Issued:

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of _____ ss:

Jason Meadows and Bill Forshee 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 Red Dillon Oil and Gas Inspector representing the Director, say that said work was commenced on the 6 day of August, 1999, and that the well was plugged and filled in the following manner:

TYPE	FROM	TO	PIPE REMOVED		LEFT
Gel	2300	2100	2" tubing	2300	-0-
Cement	2100	1800	5 ½ Csg	-0-	1687
Gel	1800	1650	6 Csg	-0-	1643
Cement	1650	1550			
Gel	1550	1000			
Cement	1000	900	Shot well @	1060	
Gel	900	850		803	
Cement	850	750		609	
Gel	750	650		305	
Cement	650	550	Squeeze well circulate		
Gel	550	300	Cement to surface		
Cement	300	200			
Gel	200	100			
Cement	100	-0-			

8/27/99

Description of monument: 6 ¼ Csg 5 ft long and that the work of plugging and filling said well was completed on the 14 day of August, 1999

And further deponents saith not.

Sworn and subscribe before me this 16 day of August, 1999
My commission expires: December 24, 2007

Official Seal
Notary Public, State of West Virginia
Zelma Meadows
Route 2, Box 22
Ravenswood, WV 26164
My commission expires December 24, 2007

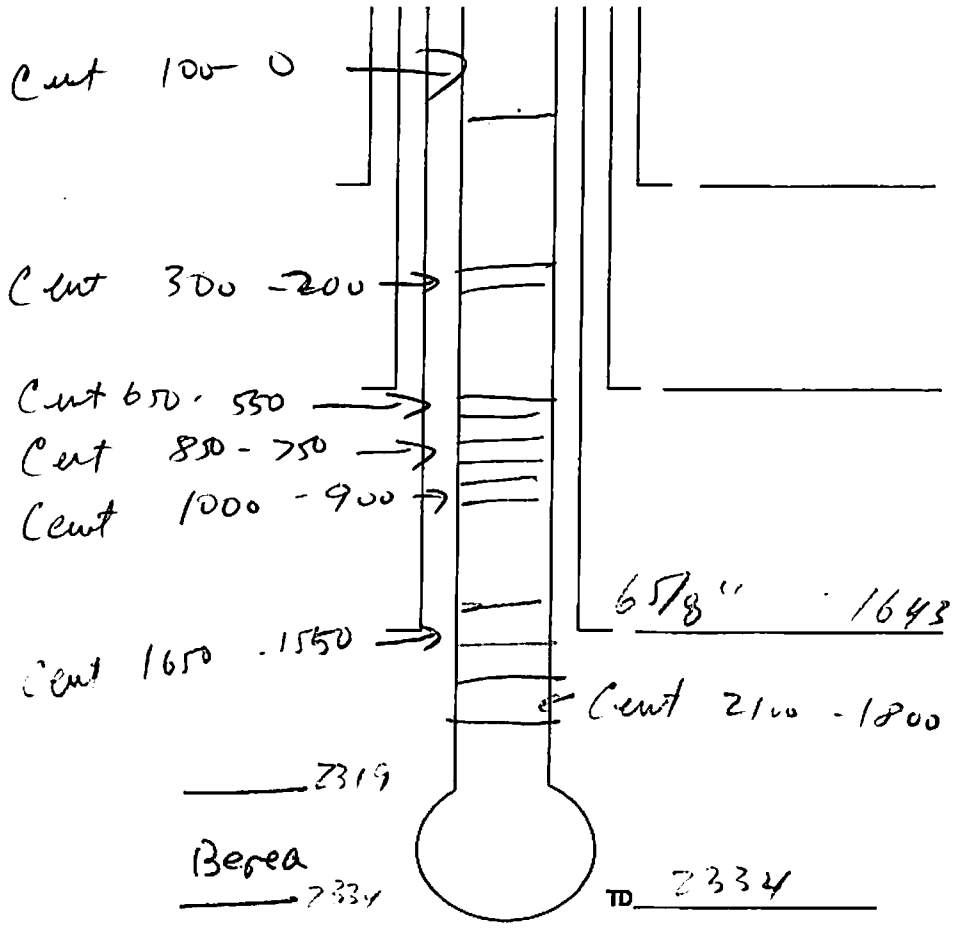
Notary Public

Inspector

JS Burdette #1

Griffithsville Unit #2 Field

47-043- 07224



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

(521)

AOR - Well Review Checklist

API Number: 47- 043 - 02225 Area Permit Number: 2R AP
Operator Name: H6 Energy
Operator's Well #: 2
Farm Name: J S Burdette.
Field Name: Guthrie ville # 2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☐ Producer (NonWaterflood) ☒ Observation ☐ Other ☐
Well Status: Active ☒ Abandoned ☐ Plugged ☐
TD of well: 4093
Completion Zones: Devonian Shale Perforated Interval: 3094 - 3892

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 416,750 Northing: 4,236,247
Elevation: 268
Inside Field Boundary? ☐ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☒	Yes ☐
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☐	Yes ☒
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = 0
Bottom Hole Injection Pressure 0
Hydrostatic Pressure 0

Comments:

Drilled Deeper to Dev Shale
3 1/2" Csg cented
Berea Shale Cemented off prior to Drill Deeper

Reviewer Name: Signature:
Date Reviewed:

** Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

IR-35

8-Aug-03

API # 47 043 2225

State of West Virginia
Division of Environmental Protection
Section of Oil and Gas
Well Operator's Report of Well Work

arm name: MOSTELLER, DENNIS

Operator Well No.: BURDETTE 2

LOCATION: Elevation: 885.02

Quadrangle: GARRETT'S BEND 7.5'

District: DUVAL

County: LINCOLN

Latitude: 7,725 Feet south of 38 Deg 17 Min 30 Sec.

Longitude: 10,050 Feet west of 81 Deg 55 Min 00 Sec.

Company: EAST RESOURCES, INC.
P.O. BOX 5519
VIENNA, WV 26105-5519

Agent: PHILIP S. ONDRUSEK

Inspector: RALPH TRIPLETT

Permit Issued: 08/08/03

Well work Commenced: 12/09/03

Well work Completed: 01/07/04

Verbal plugging
permission granted on:

Rotary X Cable Rig

Total Depth (feet) 4093

Fresh water depths (ft) NA

Salt water depths (ft) NA
NA

Is coal being mined in area (Y/N) N

Coal Depths (ft): NA

Casing & Tubing	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
Size			
6 5/8"	1944.00'	1944.00'	existing
5 3/16"	1954.00'	1954.00'	existing
3 1/2"	4096.05'	4096.05'	50 sks

OPEN FLOW DATA

Producing formation Devonian Shale Pay zone depth (ft) 3094-3892

Gas: Initial open flow 5 MCF/d Oil: Initial open flow Bbl/d

Final open flow 20 MCF/d Final open flow * Bbl/d

Time of open flow between initial and final tests Hours

Static rock pressure 184 psig (surface pressure) after 24 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: EAST RESOURCES, INC.

By:

Date: 5/19/04

Treatment : Treated perforations 3094' -3892' w/ 250 gals 15% HCL, 475 Bbls variable quality foam and 50,300# 20/40 sand

Well Log :

2380		original TD
2380	4093	Devonian Shale

Elevation 826.7

FARM J.S. Burdette WELL 2 ACRES LEASE NO. 753

TOWNSHIP OR DISTRICT Duval COUNTY Lincoln STATE W.Va. N. S.377E. W.7

2M: N.W Cross Runs Water on Lease Forks of Trace Fork Map 125

BIG COMMENCED 19 COMPLETED 19 CONTRACTOR

DRG COMMENCED 1-25-17 19 COMPLETED 3-25 19 17 CONTRACTOR Wayland Oil & Gas Co.

D. D. COMMENCED 19 COMPLETED 19 CONTRACTOR

FORMATION

KIND	TOP	BOTTOM	Steel Line Established	REMARKS
Sand	966	1010		
Slate	1010	1020		
Salt Sand	1020	1620		
Slate	1620	1640		
Little Lime	1640	1697		
Pencil Cave	1697	1700		
Big Lime	1700	1870		
Big Injun	1870	1909		
Slate	1909	1912		
Shells	1912	2115		
Slate	2115	2268		
Shells	2268	2288		
Slate	2288	2340		
Brown Shale	2340	2360		
Berea Sand	2360	2380		
Oil & Gas	2362	2377		
Total Dept	2380			

CASING RECORD

6 5/8" 1944

5 3/16" 1954

2"C 2380

SIZE	BOTTOM CASING	PUT IN WELL (TALLY MEAS.)	PULLED (TALLY MEAS.)	LEFT IN WHEN AB
6 5/8	1944			
5 3/16	1954			
2"C	2380			

PACKERS

KIND	SIZE	DEPTH SET	DATE

TORPEDO RECORD

DATE SHOT	NO. QTS.	SIZE SHELL	TOP SHOT	BOTTOM	RESULT
3-28-17	60		2363	2378	

ABANDONMENT RECORD

FILLED WITH	FROM	TO	SIZE	PLUG KIND	DEPTH

REMARKS

TAL DEPTH

PRODUCTION RECORD

HOURS BEFORE SHOT SAND BBLS.

HOURS AFTER SHOT SAND BBLS.

TEST

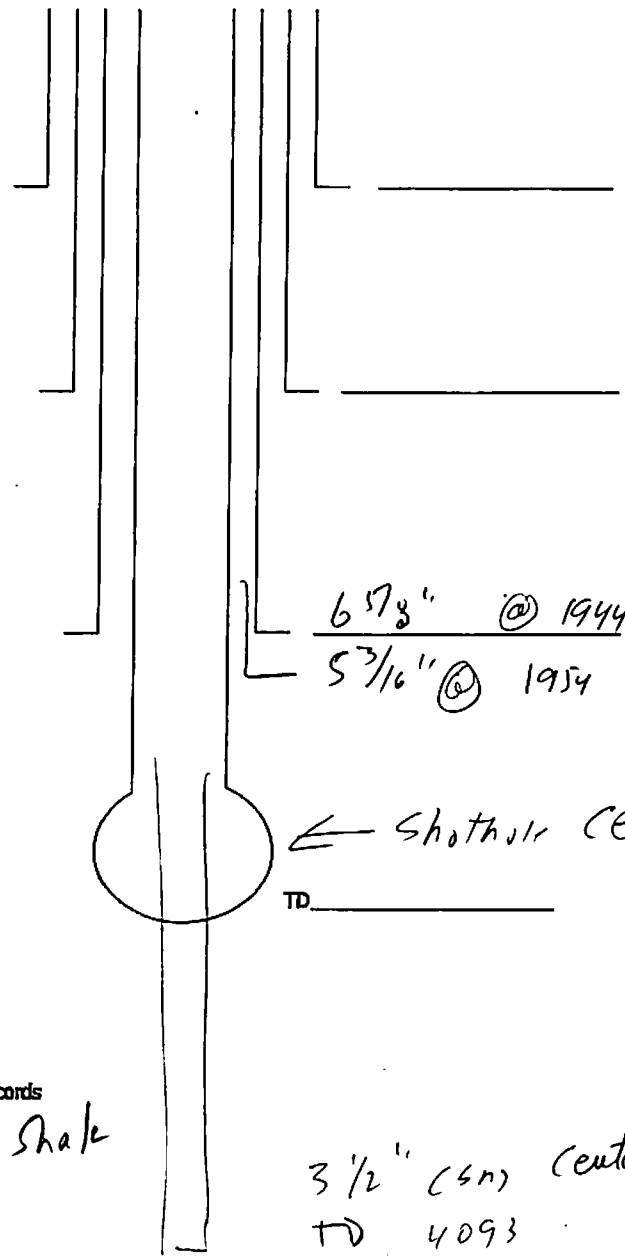
APPROVED BY SUPT.

Received
JUL 23 2003
WV Department of

J S Burdette #2

Griffithsville Unit #2 Field

47-043- 02225



From Drillers Records/Plugging Records

Drilled deep to Shale

3 1/2" (sn) (centered)
TD 4093

WVDEP OOG Internal Use Only
Rev. 6/14/16

(53)

AOR - Well Review Checklist

API Number: 47- 043 - 02227 Area Permit Number: 2R AP

Operator Name: H 6 Energy

Operator's Well #: 1

Farm Name: Mahala Coon

Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐

Well Status: Active ☐ Abandoned ☐ Plugged ☒

TD of well: 2291

Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐

Easting: 416,992 Northing: 4,236,003

Elevation: 240

Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐	
Date of Last MIT:	Passed?	No ☐	Yes ☐	
Open Hole Completion		No ☐	Yes ☒	
Well penetrates injection zone?		No ☐	Yes ☒	
Well perforated in injection zone?		No ☒	Yes ☐	
Cemented across injection zone?		No ☒	Yes ☐	
Packer immediately above injection zone (<100')?		No ☐	Yes ☐	No Packer ☐
		If No: Provide Depth:		
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒	

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**

Bottom Hole Injection Pressure **0**

Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:

Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-02227

MAR-10-2008 01:32P FROM:EAST RESOURCES 3045242813 TO:13044802239 P.2

2227

MAHALA Coon #1

Elevation 1,184.71 (Wt'r at mouth of Well) Acres

Mahala Coon Well

FARM

DISTRICT Duval COUNTY Lincoln STATE W. Va.

RIG COMMENCED 19 CONTRACTOR

RIG COMMENCED March 7th 19 12 COMPLETED May 8th 1912 CONTRACTOR Holley Oil & Dev. Co.

D. COMMENCED 19 COMPLETED 19 CONTRACTOR

LEASE NO. 2227 17-5-W

N. S. 79 E. W. 76

FORMATION

KIND	TOP	BOTTOM	STEEL LINE MEASUREMENT	REMARKS
Surface		16		
Slate	16	40		
Lime	40	70		
Slate & Shell	70	250		
White sand	250	430		
Black sand	430	460		
Slate	460	520		
Sand shells	520	560		
Slate & Shell	560	620		
Black slate	630	640		
White sand	640	660		
Black slate	660	735		
Lime	735	740		
White sand	740	770		
Black slate	770	880		
Sand	880	900		
Black slate	900	990		
Salt sand	1010	1590		
Little Lime	1590	1620		
Big lime	1620	1790		
Big Injun	1790	1820		
Slate	1820	1890		
Lime	1890	1930		
Lime shells	1930	2262		
Black shale	2262	2278		
Berea sand	2278	2291		
Total Depth		2291		

TOTAL DEPTH

PRODUCTION HEIGHT

24 HOURS BEFORE SHOT SAND BBLS.

24 HOURS AFTER SHOT SAND BBLS.

GAS TEST

CASING RECORD

8-5-36

SIZE	BOTTOM CASING (STEEL LINE)	PUT IN WELL (TALLY MEAS.)	PULLED (TALLY MEAS.)	LEFT IN WHEN ABN'D.
6-5/8	1634		1610'	
5-3/16	1620			
2"C	2291			

PACKERS

KIND	SIZE	DEPTH SET	DATE SET

TORPEDO RECORD

DATE SHOT	No. QTS.	SIZE SHELL	TOP SHOT	BOTTOM	RESULT
5-11-12	90				
7-11-36	100	Bomb Shot			

ABANDONMENT RECORD

FILLED WITH	FROM	TO	SIZE	PLUG KIND	PLUG DEPTH

REMARKS

10-26-28 Run 1620' 5 3/16" Casing
Lay on 8/5-36 Pulled 5 3/16" Casing left off Pulled and 6 5/8" Casing Left in Hole + Reamed 1" Hole Cleaned Out to 2241'

APPROVED BY SUPT.

API# 47-043-2227

WWR-38

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY
DIVISION 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: Mahala Coon
LOCATION: Elevation: 792'
District: Duval
Latitude: _____
Longitude: _____

Operator Well No.: No. 1
Quadrangle: Garrett's Bend 7.5'
County: Lincoln
Deg. ____ Min. ____ Sec. ____
Deg. ____ Min. ____ Sec. ____

Well Type: Oil X Gas ____ WIW ____

Company: East Resources Inc.
P.O. Box 5519
Vienna, WV 26105
Agent: Philip S. Ondrusek
Inspector: Ralph Triplett
Permit Issued: 07/30/2008'

Coal Operator or Owner: NA

Coal Operator or Owner: NA

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Wood ss:
Mark Miller and Paul Stevens 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 East Resources Inc., well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 13th day of March, 2009, and that the well was plugged and filled in the following manner:

TYPE	FROM	TO	PIPE REMOVED	LEFT
			6 5/8" 205'	1429'
Cement	2250'	2150'		
Cement	1750'	1650'		
Cement	1650'	1550'		
Cement	990'	890'		
Cement	858'	750'		
Cement	350'	250'		
Cement	200'	0		
		Perforated 6 5/8" Casing 3 Shots; 950'-947', 700'-697' and		
		300'-297'		
6% Gel Between Cement Plugs				

Description of monument: 7" x 5'
and that the work of plugging and filling said well was completed on the 20th day of March, 2009'
And further deponents saith not.

Mark Miller
Paul Stevens

Sworn and subscribe before me this 13th day of April, 2009

S. Dianne Dulaney
Notary Public

My commission expires: Oct. 4, 2016

OFFICIAL SEAL
NOTARY PUBLIC
STATE OF WEST VIRGINIA
S. DIANNE DULANEY
P. O. Box 5519
Vienna, West Virginia 26105
My Commission Expires Oct. 4, 2016

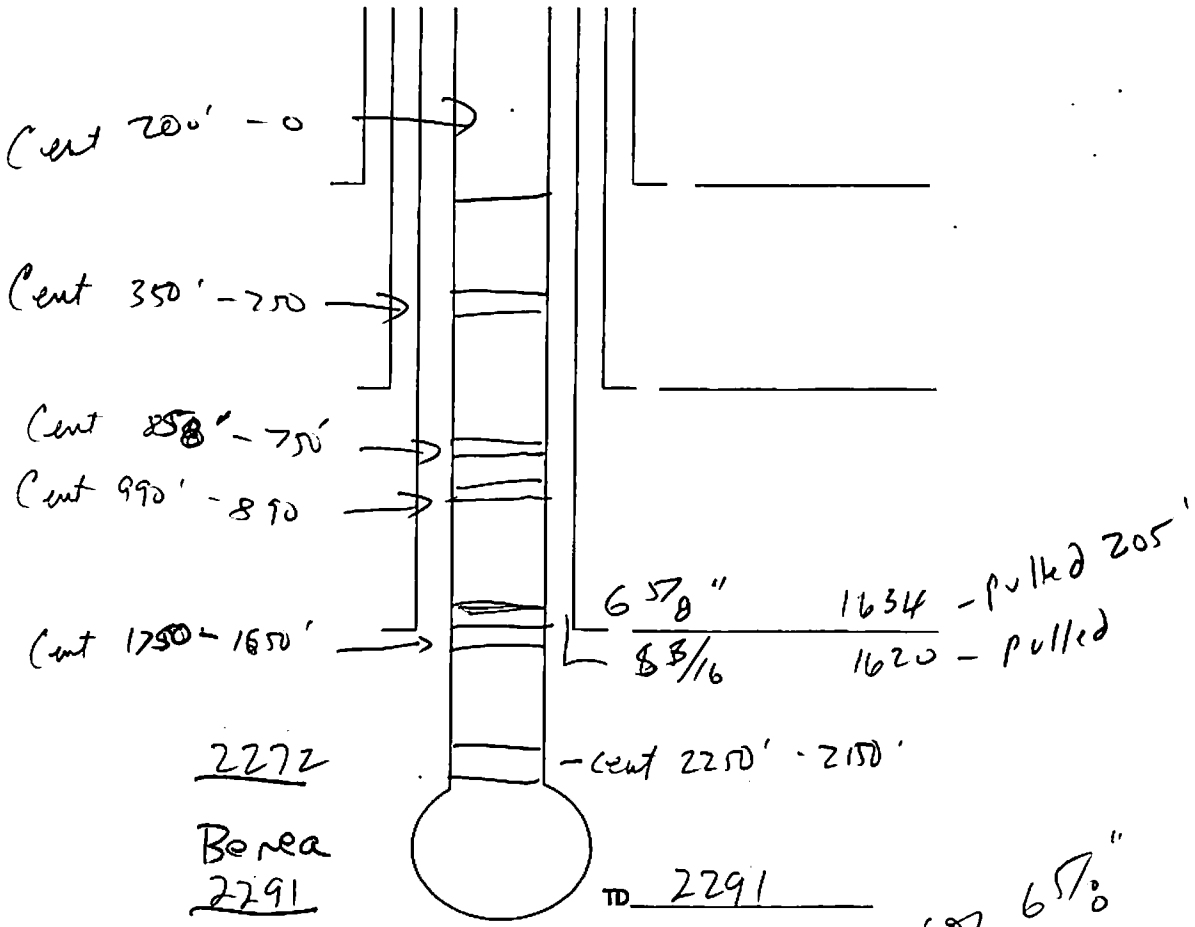
Affidavit reviewed by the Office of Oil and Gas:

Ralph D. Triplett
Title: District Inspector

Mohola Corr 1

Griffithsville Unit #2 Field

47-043- 02227



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
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(54)

AOR - Well Review Checklist

API Number: 47- 043 - 02228 Area Permit Number: 2R AP
Operator Name: H & E
Operator's Well #: 2
Farm Name: Mahola Coon
Field Name: Smithsville #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☐ Producer (NonWaterflood) ☐ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☒ Plugged ☐
TD of well: 2371
Completion Zones: Berea Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 417,357 Northing: 4,236,276
Elevation: 264
Inside Field Boundary? ☐ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☐

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Casing leak TA.

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

3-22 Elevation 874.00 Watershed Road Fork of Trace Fork 47-043-02220

Mahala Coal WELL (2) ACRES LEASE NO. 75047

IP OR T Duval COUNTY Lincoln STATE W. Va. N. S. 79 E. W. 75 Map 124W

MM ED March 30 19 14 COMPLETED May 12 19 14 CONTRACTOR Wayland Oil & Gas Co.,

IMMENCED 19 COMPLETED 19 CONTRACTOR

MMENCED 19 COMPLETED 19 CONTRACTOR

FORMATION

KIND	TOP	BOTTOM	STEEL LINE MEASUREMENT	REMARKS
uctor		16		
rock	16	90		
	190	220		
e	220	250		
	250	690		
e & shells	690	1035		
sand	1035	1625		
n sand	1630	1662		
ie lime	1662	1682		
il cave	1682	1692		
lime	1692	1855		
Injun	1855	1905		
shells	1905	2080		
e	2082	2552		
a sand	2352	2371		
tal depth		2371		

CASING RECORD

SIZE	BOTTOM CASING (STEEL LINE)	PUT IN WELL (TALLY MEAS.)	PULLED (TALLY MEAS.)	LEFT IN WHEN ABN'D.
6-5/8"	1701	1701		
5-3/16"	1905			
2"	2371			

PACKERS

KIND	SIZE	DEPTH SET	DATE SET

TORPEDO RECORD

DATE SHOT	NO. QTS.	SIZE SHELL	TOP SHOT	BOTTOM	RESULT
5-27-14	60				
10-19-37	50	4¼+4½	1353	1371	Open Flow

ABANDONMENT RECORD

FILLED WITH	FROM	TO	SIZE	PLUG KIND	PLUG DEPTH

REMARKS

AL TH

PRODUCTION RECORD

HOURS BEFORE SHOT SAND BBLS.

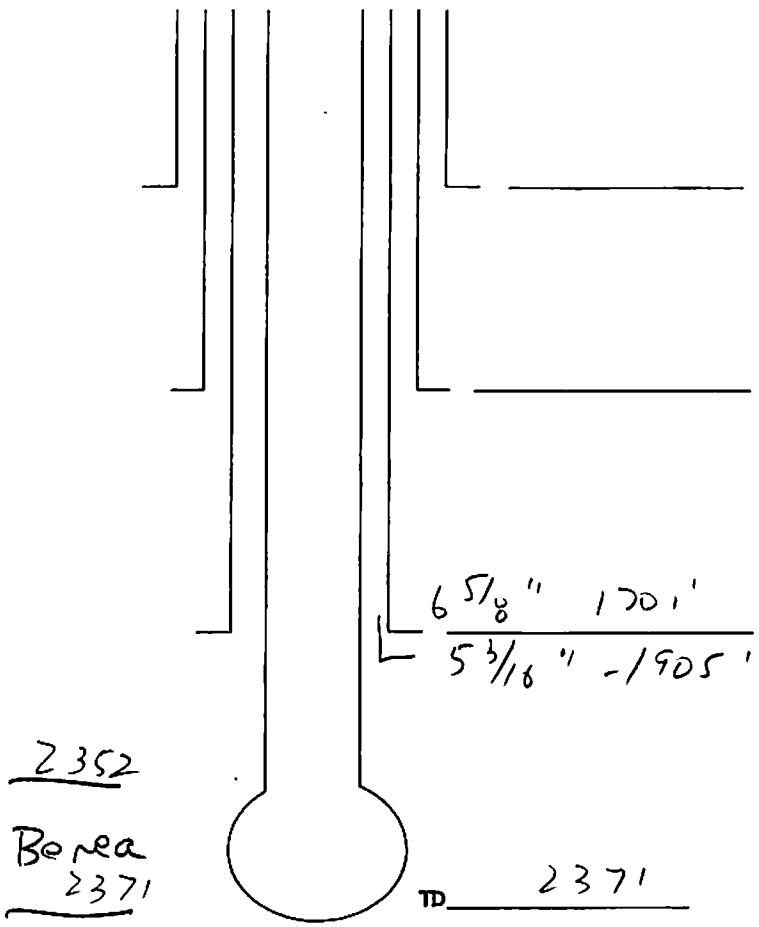
HOURS AFTER SHOT SAND BBLS.

TEST

Mohola Coon 2

Griffithsville Unit #2 Field

47-043- 02228



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

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AOR - Well Review Checklist

API Number: 47- 043 02229 Area Permit Number: 2R AP
Operator Name: H G E
Operator's Well #: 3
Farm Name: Nichola Coon
Field Name: Gatts ville 2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☐ Producer (NonWaterflood) ☑ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☒ Plugged ☐
TD of well: 2420
Completion Zones: Berea Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 417,141 Northing: 4,235,899
Elevation: 279
Inside Field Boundary? ☐ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☐

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = 0
Bottom Hole Injection Pressure 0
Hydrostatic Pressure 0

Comments:

Casing leak TA

Reviewer Name: Signature:
Date Reviewed:

** Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-02229

Well No. Three — Date of Location — 19

Rig Commenced April 19th, 19 18 } Mahala Coon Contract

Rig Completed 19 }

Drilling Commenced 19 } Contract

Drilling Completed September 26th, 19 18 }

CASING RECORD

Size	Charged to Well: Feet	In	Put in Well: Feet	In.	Bottom of Casing: Feet	In.	Pulled out of Well: Feet	In.	Left in Well: Feet	In.	Transferred to Form Completion: Feet	In.	Left at Well not in Use: Feet
8	340		340		340		340						
6-5/8	1735		1735		1735				1735				

Formation	Top	Bottom	Thickness
Surface		14	
Lime Shell	12	20	
Red Rock	20	230	
Slate & Shells	230	600	
Lime Shell	600	650	
Sand & Slate	650	1040	
Lime	1040	1050	
Slate	1050	1085	
Salt Sand	1085	1680	
Lime & Slate	1680	1908	
Injun Sand	1908	1948	
Slate & Shells	1948	2383	
Brown Shale	2383	2403	
Keren Sand	2403	2420½	
Pay	2405	2419	
Total Depth.		2420	

SHOT RECORD

Month	Day	Yr.	Size Shot	Length of Shell	Top of Shot	Bottom Shot
10	5	18	60			
7	17	35	80	6'	2416'	24

REMARKS:

Water at 1165'

Bottom Hole packer on 6-5/8" Casing

ABANDONED 19

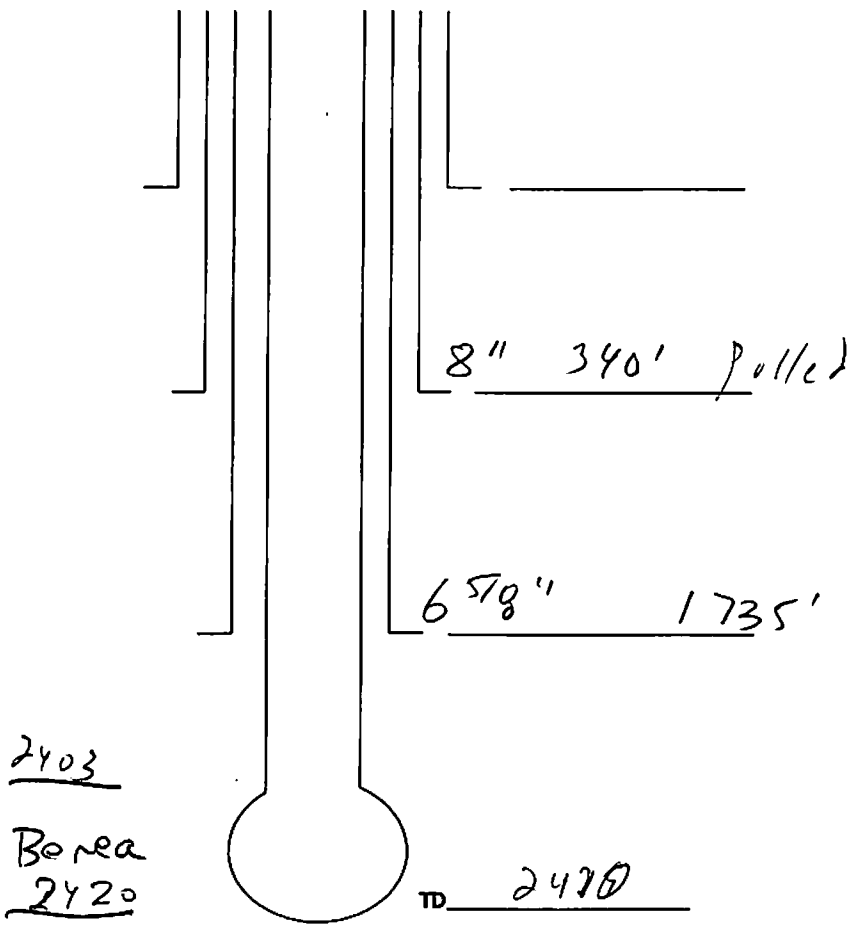
Size	Casing Pulled		Casing Left In		

REMARKS: El = 925.00

Mahola Coon 3

Griffithsville Unit #2 Field

47-043- 02229



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

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AOR - Well Review Checklist

API Number: 47- 043 - 02230 Area Permit Number: 2R AP
Operator Name: HGE
Operator's Well #: 4
Farm Name: Mahala Coon
Field Name: Griffiths Ville #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☐ Producer (Non Waterflood) ☑ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☐
TD of well: 4406
Completion Zones: Dev Shale Perforated Interval: 3468 - 4284

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 417,289 Northing: 4,235,935
Elevation: 315
Inside Field Boundary? ☐ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☑	Yes ☐	
Date of Last MIT: _____	Passed?	No ☐	Yes ☐	
Open Hole Completion		No ☒	Yes ☐	
Well penetrates injection zone?		No ☐	Yes ☒	
Well perforated in injection zone?		No ☒	Yes ☐	
Cemented across injection zone?		No ☐	Yes ☑	
Packer immediately above injection zone (<100')?		No ☐	Yes ☐	No Packer ☐
		If No: Provide Depth:		
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☑	

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

5 1/2 csg cented below Shale
3 1/2 csg centid at TD.

Reviewer Name: _____ Signature: _____
Date Reviewed: _____

** Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-02230

WR-35

30-Jul-01

API # 47 043 02230

State of West Virginia
Division of Environmental Protection
Section of Oil and Gas

Well Operator's Report of Well Work

Farm name: East Resources Inc

Operator Well No.: Mahala Coon No. 4

LOCATION: Elevation: 1037.77'

Quadrangle: Garrets Bend 7.5'

District: Duval

County: Lincoln

Latitude: 8,725 Feet south of 38 Deg 17 Min 30 Sec.

Longitude: 8,275 Feet west of 81 Deg 55 Min 00 Sec.

COPY

Company: EAST RESOURCES, INC.
P.O. BOX 5519
VIENNA, WV 26105-5519

Agent: MICHAEL MCCOWN

Inspector: Dave Belcher

Permit Issued: 07/30/01

Well work Commenced: 08/09/01

Well work Completed: 11/28/01

Verbal plugging permission granted on: _____

Rotary X Cable _____ Rig

Total Depth (feet) 4406'

Fresh water depths (ft) NA

Salt water depths (ft) NA

Is coal being mined in area (Y/N) N

Coal Depths (ft): NA

Casing & Tubing	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
Size			
6 5/8"	1877'	1877'	Existing
5 1/2"	2554'	2554'	100 Sacks
3 1/2"	4395'	4395'	55 Sacks

OPEN FLOW DATA

Producing formation Devonian Shale Pay zone depth (ft) 3468'-4284'

Gas: Initial open flow 5 MCF/d Oil: Initial open flow _____ Bbl/d

Final open flow 39 MCF/d Final open flow _____ Bbl/d

Time of open flow between initial and final tests _____ Hours

Static rock pressure 250 psig (surface pressure) after 48 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: EAST RESOURCES, INC.

By: [signature]

Date: 1/2/02

47-043-02230
Mahala Coon #4

Treatment : Perfs: 3468'-4284' - treated w/ 1000 gal 15% HCL and 1.51 MMSCF Nitrogen

Well Log : TD = 4406'

Original TD = 2538'
2538' -4406' Devonian Shale

47-043-02230

ARM Inhale Coon WELL 4 ACRES LEASE NO. 75041

OWNERSHIP OR DISTRICT Duval Dist. COUNTY Lincoln STATE West Va. N. S. 79 E. W. 75 Mer 1240

D COMMENCED 1-14 19 21 COMPLETED 3-24 19 21 CONTRACTOR

TO COMMENCED 2-9 19 21 COMPLETED 3-18 19 21 CONTRACTOR Eddystone Oil Corporation

D. COMMENCED 19 COMPLETED 19 CONTRACTOR

FORMATION

KIND	TOP	BOTTOM	STEEL LINE MEASUREMENT	REMARKS
Conductor	12			
Red mud	12	250		
Sand	250	300		
Slate	300	360		
Mud	360	390		
Sand	390	425		
Slate	425	650		
Lime	650	700		
Sand	700	800		
Slate	800	850		
Lime	850	900		
Sand	900	980		
Slate	980	1020		
Sand	1020	1050		
Slate	1050	1195		
Salt Sand	1195	1762		
Keazon Sand	1762	1812		
Little Lime	1812	1845		
Pencil Cave	1845	1851		
Big Lime	1851	2036		
Big Injun	2036	2080		
Slate	2080	2105		
Shell	2105	2130		
Slate	2130	2160		
Shells	2160	2260		
Slate	2260	2499		
Brown Shale	2499	2519		
Berea Sand	2519	2538		
TOTAL DEPTH		2538		

CASING RECORD

SIZE	BOTTOM CASING (STEEL LINE)	PUT IN WELL (TALLY MEAS.)	PULLED (TALLY MEAS.)	LEFT IN HOLE (TALLY MEAS.)
8 5/8		390	390	
6-5/8	1877	1877		
5 3/16		1018		
2 7/16		2536		

PACKERS

KIND	SIZE	DEPTH SET	DATE SET
6-5/8" Parmaco S. S.	18	1857	

TORPEDO RECORD

DATE SHOT	NO. QTS.	SIZE SHELL	TOP SHOT	BOTTOM	RESULT
3-28-21	90	5½"	2519	2537	

ABANDONMENT RECORD

FILLED WITH	FROM	TO	SIZE	PLUG KIND	DEPTH

REMARKS

PRODUCTION RECORD

24 HOURS BEFORE SHOT ____ BBLS. SAND ____ BBLS. SAND

24 HOURS AFTER SHOT

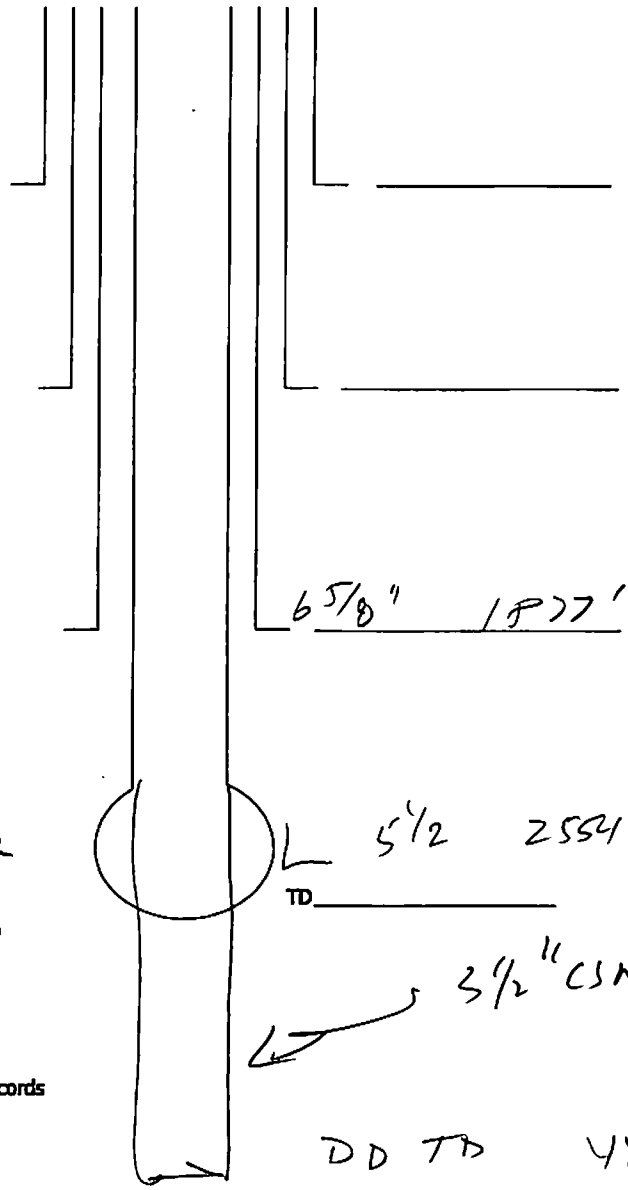
GAS TEST

APPROVED BY ____ SUPT.

Mobile Co. 4

Griffithsville Unit #2 Field

47-043- 02230



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

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AOR - Well Review Checklist

API Number: 47- 043 - 02231 Area Permit Number: 2R AP

Operator Name: H 6 Energy

Operator's Well #: 1

Farm Name: Thomas Cooper

Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐

Well Status: Active ☐ Abandoned ☐ Plugged ☒

TD of well: 2346

Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐

Easting: 416,771 Northing: 4,232,423

Elevation: 257

Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐	
Date of Last MIT:	Passed?	No ☐	Yes ☐	
Open Hole Completion		No ☐	Yes ☒	
Well penetrates injection zone?		No ☐	Yes ☒	
Well perforated in injection zone?		No ☒	Yes ☐	
Cemented across injection zone?		No ☒	Yes ☐	
Packer immediately above injection zone (<100')?		No ☐	Yes ☐	No Packer ☐
		If No: Provide Depth:		
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒	

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**

Bottom Hole Injection Pressure **0**

Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:

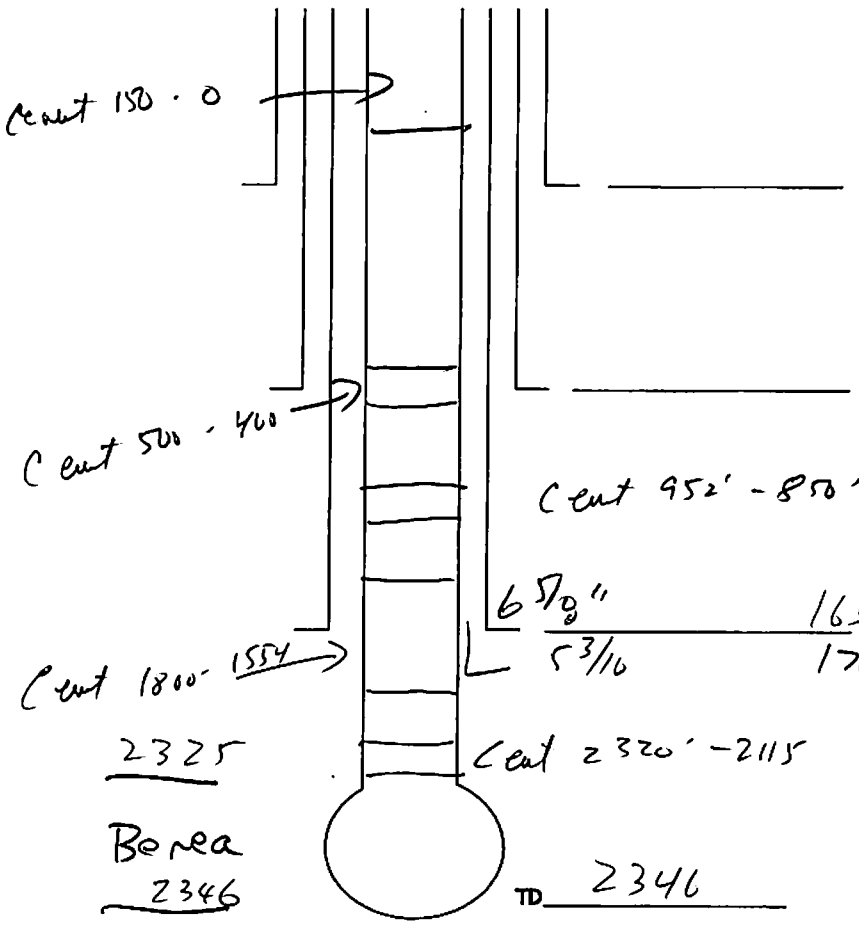
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

Thomas Cooper #1

Griffithsville Unit #2 Field

47-043- 02231



Unable to pull 6 5/8" Csg
Operator pulled 110' 5 1/2 - left 1590'

From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

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AOR - Well Review Checklist

API Number: 47- 043 - 30647 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 2
Farm Name: Thomas Cooper
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2379
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 416,891 Northing: 4,232,274
Elevation: 270
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐	
Date of Last MIT:	Passed?	No ☐	Yes ☐	
Open Hole Completion		No ☐	Yes ☒	
Well penetrates injection zone?		No ☐	Yes ☒	
Well perforated in injection zone?		No ☒	Yes ☐	
Cemented across injection zone?		No ☒	Yes ☐	
Packer immediately above injection zone (<100')?		No ☐	Yes ☐	No Packer ☐
		If No: Provide Depth:		
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒	

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

Record of Well No. 2 on [illegible] Farm [illegible] Acres [illegible]

[illegible] Field. [illegible] District [illegible] County 47-043-30447

Rig Commenced ..... 19.... Completed 19

Drilling Commenced Dec 12 1904. Completed Dec 23 1904

Cost per foot. [illegible] Contractor [illegible] Address [illegible]

Drillers' Names [illegible]

CONDUCTOR AND CASING USED IN DRILLING.

Conductor	13 inch	10 inch	8¼ inch	8 inch	7¼ inch	6¼ inch	6¼ inch	5¼ inch	5 3/16 inch	4¼ inch
111						1675				

CONDUCTOR AND CASING LEFT IN WELL.

Conductor	13 inch	10 inch	8¼ inch	8 inch	7¼ inch	6¼ inch	6¼ inch	5¼ inch	5 3/16 inch	4¼ inch
111						1675				

OIL WELL **GAS WELL**

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods	Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure
9/10		2nd Shot	3/16/1903	1302 ft.					

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
[illegible]		14	14	Elev 831.
[illegible]	14	90	76	
[illegible]	90	225	135	3 of Lead at 250 ft
[illegible]	225	250	25	Strong Flow at 340 ft
[illegible]	250	495	245	10" & 8"
[illegible]	495	515	20	
[illegible]	515	700	185	
[illegible]	700	740	40	
[illegible]	740	800	60	
[illegible]	800	830	30	
[illegible]	830	910	80	
[illegible]	910	960	50	
[illegible]	960	1610	650	Gas Flow at 1030
[illegible]	1610	1630	20	
[illegible]	1630	1664	34	
[illegible]	1664	1668	4	
Big Lime	1668	1850	182	
[illegible]	1850	1930	80	
[illegible]	1930	2335	405	
[illegible]	2335	2355	20	
Big Injun	2355	2377	22	Good Show of Gas
[illegible]	2377	[illegible]		

47-043-30647

FORM OG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

South Penn Natural Gas Co.
LEASE OR PROPERTY OWNER

Parkersburg, W. Va.
ADDRESS

C. R. DeLay
NAME OF WELL OPERATOR

P. O. Box 49 Hamlin, W. Va.
COMPLETE ADDRESS

April 4, 1949
WELL AND LOCATION

Duval District

Lincoln County

Well No. 2

Thomas Cooper Farm

STATE INSPECTOR SUPERVISING PLUGGING D. E. Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

C. R. DeLay and Bethel Wade 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 C. R. DeLay, well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 20 day of March, 1949, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD	FILLING MATERIAL			PLUGS USED	CASING	
FORMATION	CONTENT	FROM	TO	SIZE & KIND	CSG PULLED	CSG LEFT IN
Permanent Bridge		2330	2325			
	Cement	2325	2315			
	Stone	2315	2310			
	Clay	2310	2200			
	Cement	2200	2190			
Permanent Bridge		1935	1930			
	Cement	1930	1920			
	Stone	1920	1915			
	Clay	1915	1708			
	Cement	1708	1698			
	Stone	1698	1693			
Pulled 6-5/8" casing loose and out as hole was filled						
	Clay	1693	940		6-5/8" 1678	
	Cement	940	930			
Permanent Bridge		255	250			
COAL SEAMS	Cement	250	240	DESCRIPTION OF MONUMENT		
(NAME)	Stone	240	235	18"X18"X30" Concrete Block		
(NAME)	Filled with clay to surface			March 24, 1949		
(NAME)						
(NAME)						

and that the work of plugging and filling said well was completed on the 24 day of March, 1949.

And further deponents saith not.

C. R. DeLay

Sworn to and subscribed before me this 18 day of April, 1949.

W. T. Boulton
Notary Public.

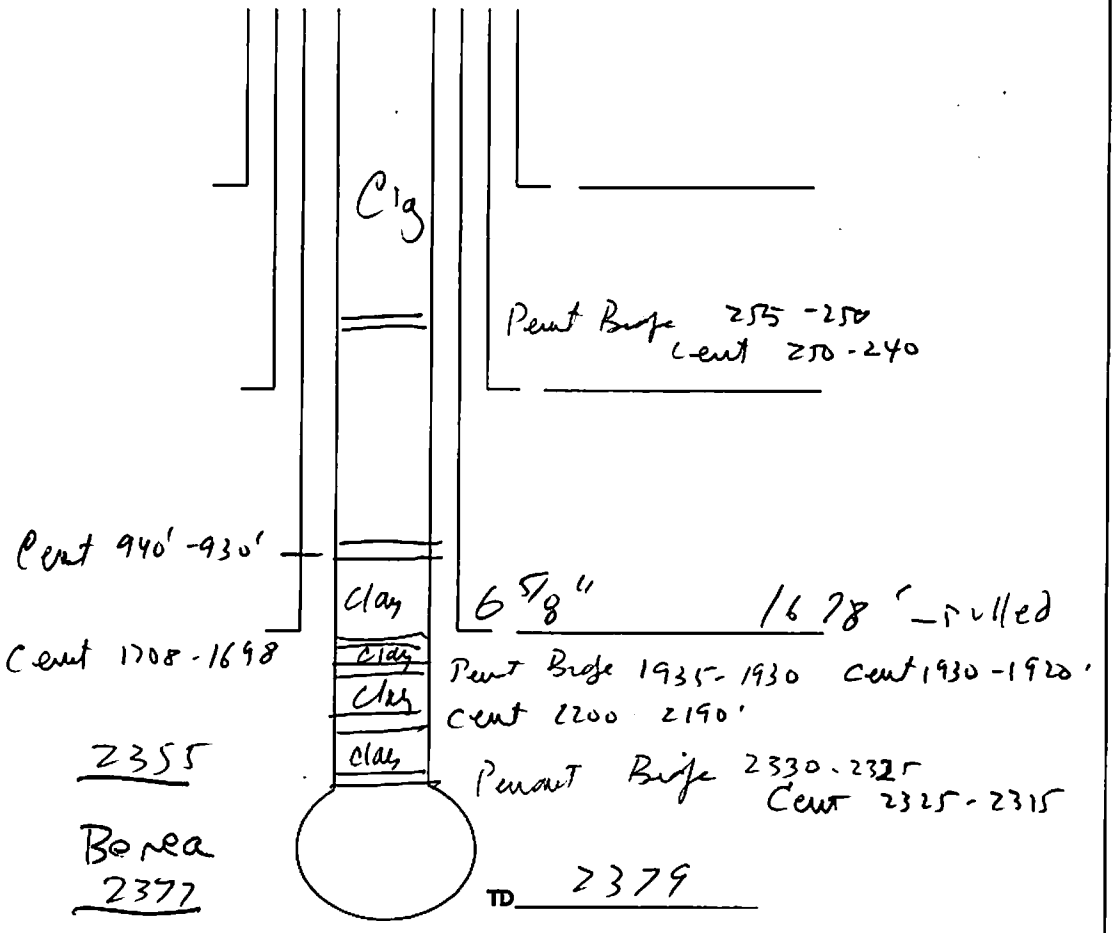
My commission expires:
Aug. 16-1949

Permit No. Fm-647

Thomas Cooper 2

Griffithsville Unit #2 Field

47-043- 30647



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

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AOR - Well Review Checklist

API Number: 47- 043 - 31048 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 3
Farm Name: Thomas Cooper
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2471
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 416,905 Northing: 4,238,106
Elevation: 296
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**

Bottom Hole Injection Pressure **0**

Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:
Date Reviewed:

** Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

If Well No. 3 on Lucas County Farm Acres Unknown

6 Field, Duval District Lincoln County,

, Commenced ..... 19 .., Completed 19

Drilling Commenced Aug 2 1909. Completed Oct 2 1909

Cost per foot, 1.10 Contractor, Miller Bros Address, Quarry Wis.

Drillers' Names, J.H. Bolander & Jas. McCabe

CONDUCTOR AND CASING USED IN DRILLING.

Conductor	12 inch	10 inch	8¼ inch	6 inch	7¼ inch	6¼ inch	6¼ inch	6¼ inch	5 3/16 inch	4¼ inch
16						1770				

CONDUCTOR AND CASING LEFT IN WELL.

Conductor	12 inch	10 inch	8¼ inch	6 inch	7¼ inch	6¼ inch	6¼ inch	6¼ inch	5 3/16 inch	4¼ inch
16						1770				

OIL WELL GAS WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods		Size of Packer	Depth Set	Tubing	Rock Pressure	Rock Pressure
10/5/09	90 qts	2nd Sand 8 57	1113	1109	8 3rd	4th & 5th	1509			

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Surface		16	16	
Sand	16	36	20	390 ft of 10" hole made
Hard State	36	56	20	110 8" Casing used
Sand	56	116	60	6½ ft Drilling rate
Slate	116	234	118	
Sand	234	390	156	Salt Sand water at 1130
Slate	390	396	6	
Coal	396	399	3	
Slate	399	410	11	
Sand	410	540	130	
Slate	540	560	20	
Sand	560	580	20	
Slate	580	600	20	
Sand	600	710	110	
Slate	710	730	20	
Sand	730	765	35	
Slate	765	800	35	
Lime	800	816	16	
Sand	816	895	79	
Slate	895	965	70	
Sand	965	1020	55	
Slate	1020	1075	55	
Salt Sand	1075	1710	635	
Slate	1710	1715	5	
Brown Lime	1715	1750	35	
Big Lime	1750	1940	190	
Big Injun	1940	2010	70	
Lime Shells	2010	2180	170	
Weir Sand	2180	2340	160	
Lime Shells	2340	2430	90	
Black Slate	2430	2450	20	
Berea Sand	2450	2471	21	

47-043-31048

47.043 - 31048

FORM 66-6

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

LEASE OR PROPERTY OWNED

ADDRESS

G. S. H. Supply Co.
NAME OF WELL OPERATOR
Griffithsville, W. Va.
COMPLETE ADDRESS
February 9, 1952
WELL AND LOCATION
Duval District
Lincoln County
Well No. 3
Thomas Cooper Farm

STATE INSPECTOR SUPERVISING PLUGGING Dan E. Larson

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

J. C. Whittaker and R. D. Thornton 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 G. S. H. Supply Co., well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 25 day of Nov., 19 51, and that the well was plugged and filled in the following manner:

CASING OR ZONE RECORD	FILLING MATERIAL			PLUGS USED	CASING	
FORMATION	CONTENT	FROM	TO	SIZE & KIND	CSG PULLED	CSG LEFT IN
	set tar, bridge	2425'		7"	220'	1550'
	neat cement	2425'	2345'	5"	1782'	none
	crushed stone	5'				
	filled with clay	2340'	2325'			
	neat cement	2325'	2320'			
	set bridge	2320'				
	neat cement	2000'	1850'			
	Crushed stone	5'				
	Filled with clay	1985'	1800'			
	Neat cement	1800'	1790'			
	crushed stone	5'				
	set bridge	1275'				
	Neat cement	1270'	1265'			
	crushed stone	5'				
	filled with clay	1260'	1055'			
	Neat cement	1055'	1045'			
	set por. bridge	1000'				
COAL SEAMS	Neat cement	1000'	350'	DESCRIPTION OF MONUMENT		
(Name)	crushed stone	5'	surface	Erected marker according to		
(Name)	filled with clay			rule 18, 1931 regulations.		
(Name)						
(Name)						

and that the work of plugging and filling said well was completed on the 2 day of December, 19 51

And further deponents saith not.

J. C. Whittaker
R. D. Thornton

Sworn to and subscribed before me this 13 day of Feb, 1952

J. R. Osborne
Notary Public.

My commission expires: Oct 9 1953

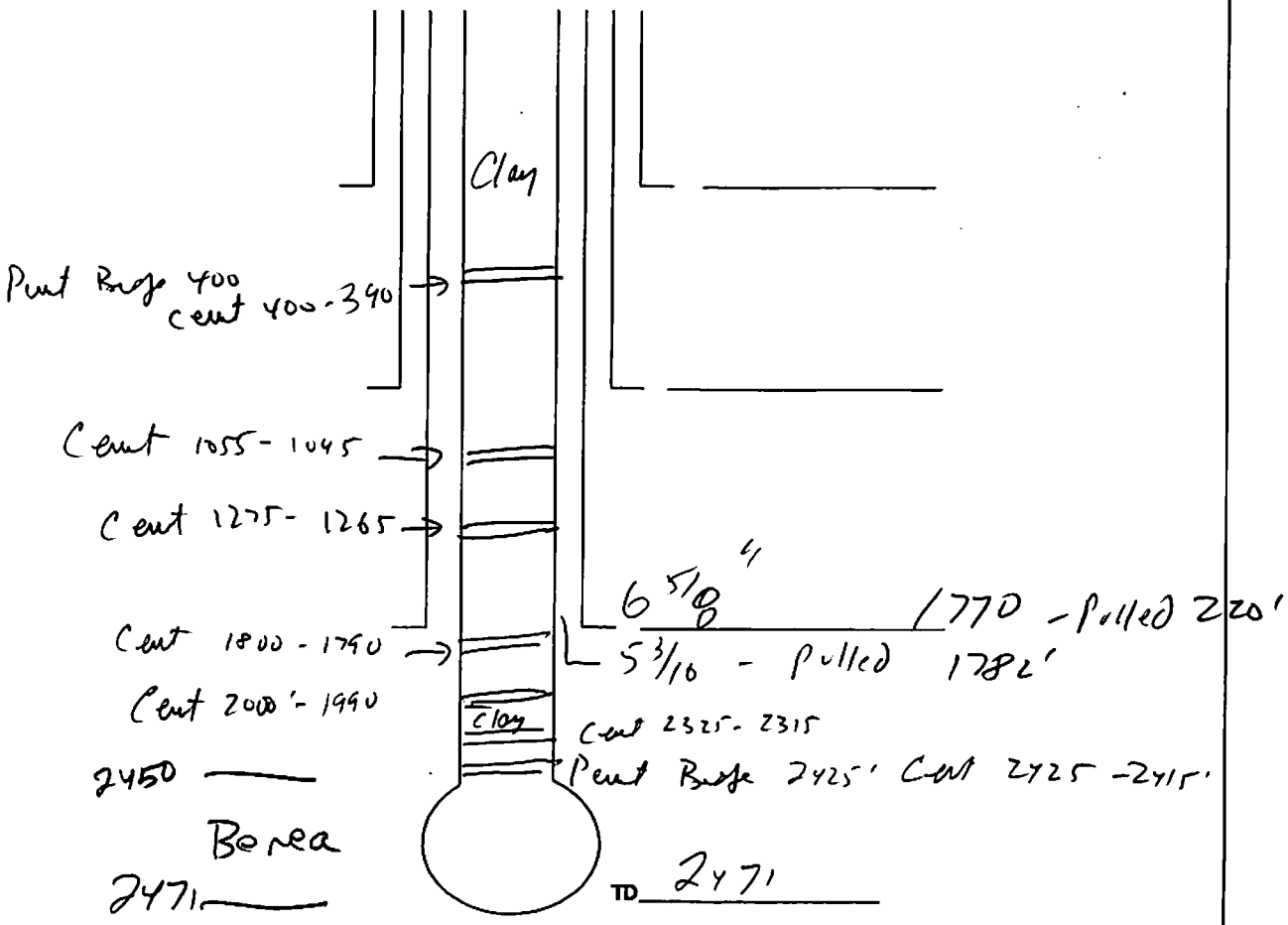
Permit No. Lin. - 1018

FEB 1952
DEPARTMENT OF MINES

Thomas Cooper 3

Griffithsville Unit #2 Field

47-043- 3104 8



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/8/16

(60)

AOR - Well Review Checklist

API Number: 47- 043 - 31047 Area Permit Number: 2R AP

Operator Name: H 6 Energy

Operator's Well #: 4

Farm Name: Thomas Cooper

Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐

Well Status: Active ☐ Abandoned ☐ Plugged ☒

TD of well: 2519

Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐

Easting: 417,169 Northing: 4,232,036

Elevation: 314

Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**

Bottom Hole Injection Pressure **0**

Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:

Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

Record of Well No. 11 on [illegible] Farm Acres 47-043-31047

Field, District County, ✓

Rig Commenced 19 Completed 19

Drilling Commenced [illegible] 19[illegible], Completed [illegible] 21 19[illegible]

Cost per foot, Contractor, Address,

Drillers' Names,

CONDUCTOR AND CASING USED IN DRILLING.

Conductor	13 inch	10 inch	8¼ inch	8 inch	7⅝ inch	6⅝ inch	6¼ inch	5⅝ inch	5 3-16 inch	4½ inch
15'						1515				

CONDUCTOR AND CASING LEFT IN WELL.

Conductor	13 inch	10 inch	8¼ inch	8 inch	7⅝ inch	6⅝ inch	6¼ inch	5⅝ inch	5 3-16 inch	4½ inch
15'						1515				

OIL WELL **GAS WELL**

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods		Size of Packer	Depth Set	Tubing	1st Hours Pressure	Sixth Pressure
10/[illegible]/[illegible]	[illegible]	2[illegible]	[illegible]	7/15/13	1409					

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
[illegible]		15	15	
[illegible]	15	75	60	
[illegible]	75	115	40	
[illegible]	115	215	100	
[illegible]	215	275	60	
[illegible]	275	385	110	
[illegible]	385	425	40	
[illegible]	425	430	5	430' 10" [illegible]
[illegible]	430	1080	650	
[illegible]	1080	1120	40	
[illegible]	1120	1750	630	[illegible] 1135'
[illegible]	1750	1765	15	
[illegible]	1765	1808	43	[illegible] 1180
[illegible]	1808	1812	4	
[illegible]	1812	1997	185	
[illegible]	1997	2067	70	
[illegible]	2067	2147	80	
[illegible]	2147	2297	150	
[illegible]	2297	2477	180	
[illegible]	2477	2497	20	
[illegible]	2497	2518	21	
[illegible]	2518	2519	1	

47-043 - 31047

FORM GG-3

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

LEASE OR PROPERTY OWNER

ADDRESS

G. S. H. Supply Co.
NAME OF WELL OPERATOR
Griffithsville, W. Va.
COMPLETE ADDRESS

February 9, 1952
WELL AND LOCATION
Duval District
Lincoln County
Well No. 4
Thomas Cooper Farm

STATE INSPECTOR SUPERVISING PLUGGING Dana E. Larson

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

J. C. McAllister and E. A. Record 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 G. S. H. Supply Co., well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 15 day of Nov., 1952, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD		FILLING MATERIAL		PLUGS USED	CASING	
FORMATION	CONTENT	FROM	TO	SIZE & KIND	CSG PULLED	CSG LEFT IN
	Set per. bridge	2465'		7"	754'	1054'
	neat cement	2465'	2455'	5"	249'	none
	crushed stone	5'				
	filled with clay	2450'	2367'			
	neat cement	2367'	2357'			
	set per. bridge	2055'				
	neat cement	2055'	2045'			
	crushed stone	5'				
	filled with clay	2040'	1913'			
	neat cement	1913'	1828'			
	crushed stone	5'				
	set bridge	1320'				
	neat cement	1320'	1320'			
	crushed stone	5'				
	filled with clay	1305'	1100'			
	neat cement	1100'	1090'			
	Per. bridge	400'				
	2 bags cement	400'	390'			
COAL SEAMS	crushed stone	5'		DESCRIPTION OF MONUMENT		
(NAME)	filled with clay	to surface		Painted marker according to		
(NAME)				rule 18, 1951 regulations.		
(NAME)						
(NAME)						

and that the work of plugging and filling said well was completed on the 24 day of Nov., 1952

And further deponents saith not. J. C. McAllister
E. A. Record

Sworn to and subscribed before me this 3 day of Feb., 1953.

J. R. Osborne
Notary Public.

My commission expires: Oct. 9-1958

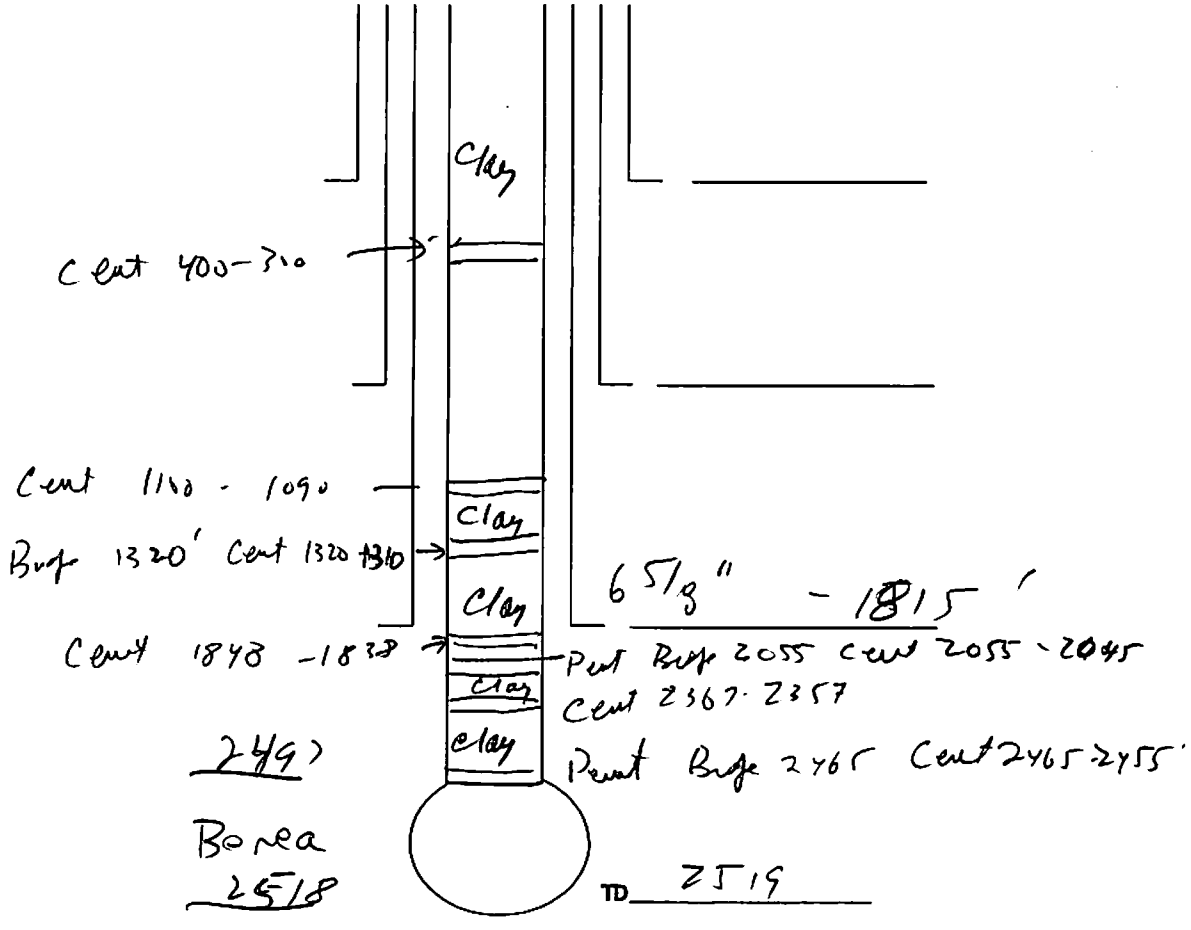
Permit No. LIn.-2047

FEB 1953 WEST VIRGINIA DEPARTMENT OF MINES

Thrasher Coal 4

Griffithsville Unit #2 Field

47-043-3104?



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev 6/14/16

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AOR - Well Review Checklist

API Number: 47- 043 - 30609 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 5
Farm Name: Tonts Cooper
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2408
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 417,191 Northing: 4,252,238
Elevation: 304
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

RECORD of Well No. 5 on Wm. Cooper Farm Acres 47-043-30609

Field, ... District ..... County .....

Rig Commenced ..... 19 ..., Completed ..... 19.....

Drilling Commenced April 24 1912, Completed June 6 1912

Cost per foot, 1.15 Contractor Hawkey & Pressnall Coal Co Address Hawkey, W. Va.

Drillers' Names Harry Lord & T. L. McConnaha

CONDUCTOR AND CASING USED IN DRILLING

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅛ Inch	6⅝ Inch	6⅛ Inch	5⅝ Inch	5 3-16 Inch	4⅓ Inch
16						1690				

CONDUCTOR AND CASING LEFT IN WELL.

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅛ Inch	6⅝ Inch	6⅛ Inch	5⅝ Inch	5 3-16 Inch	4⅓ Inch
16						1690				

OIL WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods
7-8-12	80 qts	2½ bbls	8	7/8 90 qts

GAS WELL

Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Conductor		16		445' 10" hole
Red Rock	16	85	69	
Sand	85	155	70	
Slate	155	230	75	
Sand	230	320	90	
Coal	320	325	5	
Sand	325	400	75	
Coal	400	405	5	
Sand & Lime	405	510	105	
Coal	510	515	5	
Slate	515	580	65	
Sand	580	620	40	
Slate	620	700	80	
Sand	700	710	10	
Slate	710	845	135	
Sand	845	885	40	
Slate	885	980	95	
Salt Sand	980	1635	655	Gas 1045' water 1085'
Black Slate	1635	1640	5	
Little Lime	1640	1670	30	
Pencil Cave	1670	1680	10	
Big Lime	1680	1865	185	
" Injun	1865	1945	80	
Slate	1945	2120	175	
Salt & Shells	2120	2200	80	
Shells	2200	2370	170	
Black Slate	2370	2385	15	
Gritt Sand	2385	2406	21	
Total depth		2408		

47-043-30609

FORM OG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

South Penn Natural Gas Co.
LEASE OR PROPERTY OWNER

Parkersburg, W. Va.
ADDRESS

C. R. DeLay
NAME OF WELL OPERATOR

P. O. Box 49 Hamlin, W. Va.
COMPLETE ADDRESS

March 24, 1949

WELL AND LOCATION

Auval District

Lincoln County

Well No. 5

Thomas Cooper Farm

STATE INSPECTOR SUPERVISING PLUGGING D. E. Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

C. R. DeLay and Bethel Wade

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 C. R. DeLay well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 7 day of March, 1949, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD	FILLING MATERIAL			PLUGS USED	CASING	
FORMATION	CONTENT	FROM	TO	SIZE & KIND	CSG PULLED	CSG LEFT IN
	Permanent Bridge	2370	2365			
	Cement	2365	2355			
	Stone	2355	2350			
	Clay	2350	2250			
	Cement	2250	2240			
	Permanent Bridge	1950	1945			
	Cement	1946	1935			
	Stone	1935	1930			
	Clay	1930	1737			
	Cement	1737	1727			
	Stone	1727	1722			
Pulled 5 3/16" & 6-5/8" casing loose and cut as hole was filled						
	Permanent Bridge	1305	1300		6-5/8"	1690
	Cement	1300	1290		5 3/16"	1707
	Stone	1290	1285			
COAL SEAMS	Clay	1285	910	DESCRIPTION OF MONUMENT		
	Cement	910	900			
(name) Permanent Bridge	Cement	255	250	18"X18"X30" Concrete Block		
(name)	Cement	250	240	March 18, 1949		
(name)	Stone	240	235			
(name)	Filled with clay to surface					

and that the work of plugging and filling said well was completed on the 12 day of March, 1949.

And further deponents saith not.

Bethel Wade
C. R. DeLay

Sworn to and subscribed before me this 18 day of April, 1949.

T. T. Spurlock
Notary Public.

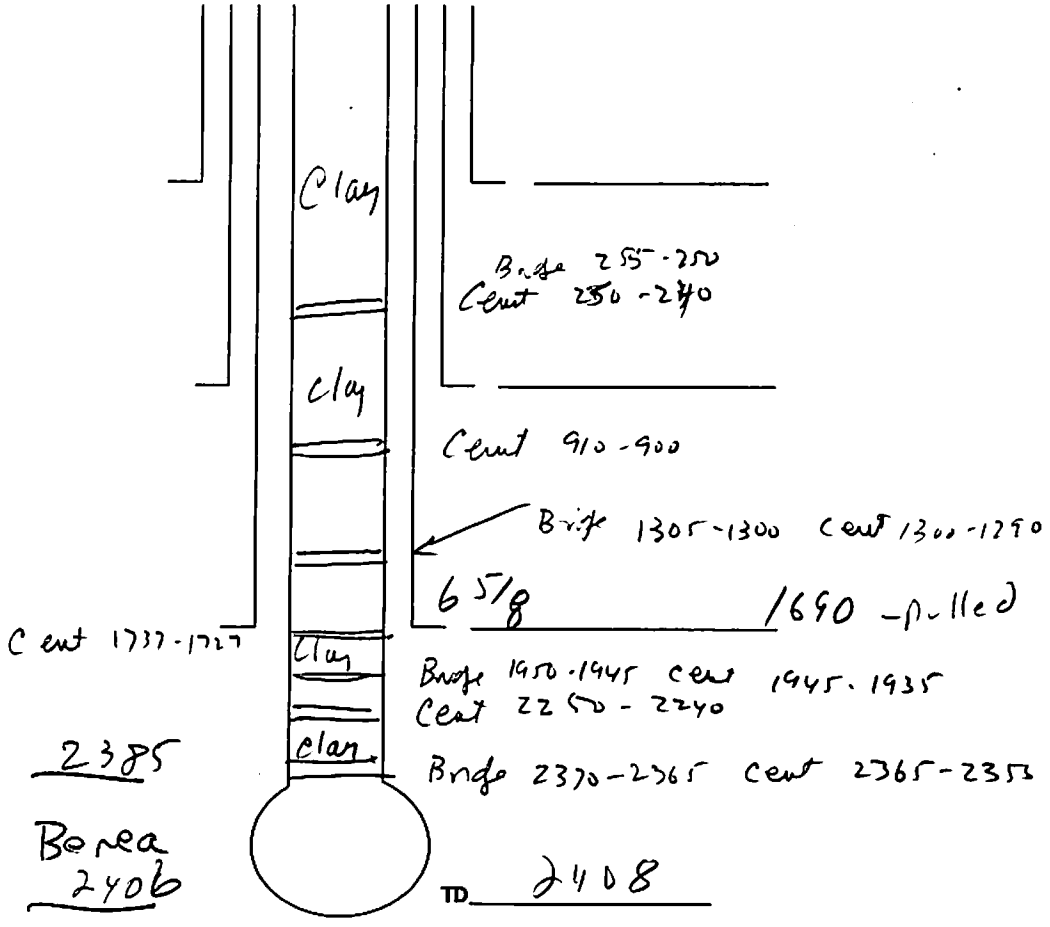
My commission expires: Aug. 16-1949

Permit No. Lin-109

Thomas Cooper 5

Griffithsville Unit #2 Field

47-043- 30609



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

(62)

AOR - Well Review Checklist

API Number: 47- 043 - 02213 Area Permit Number: 2R AP

Operator Name: H 6 Energy

Operator's Well #: 1

Farm Name: BF Cains

Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐

Well Status: Active ☐ Abandoned ☐ Plugged ☒

TD of well: 2511

Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐

Easting: 417,061 Northing: 4,234,451

Elevation: 305

Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☒ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☐

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**

Bottom Hole Injection Pressure **0**

Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:

Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

RECORD of Well No. 1 on W. H. Courtney Farm Acres Unknown

Indle Field, Duval District Lincoln County,

Rig Commenced 19, Completed 19

Drilling Commenced March 4th 1909, Completed May 10th 1909

Cost per foot, 1.15 Contractor, Weiler Bros Address, Glenville W. Va.

Drillers' Names, Jas Walsh, Sam Lewis, Jno Adkins, Jno Bevel

CONDUCTOR AND CASING USED IN DRILLING.

Conductor	13 inch	10 inch	8¼ inch	8 inch	7¼ inch	6¼ inch	6¼ inch	5¼ inch	5 inch	4¼ inch
14 ft				240		1805				

CONDUCTOR AND CASING LEFT IN WELL.

Conductor	13 inch	10 inch	8¼ inch	8 inch	7¼ inch	6¼ inch	6¼ inch	5¼ inch	5 inch	4¼ inch
14 ft				240		1805				

OIL WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods		Size of Packer	Depth Set	Tubing	1st Hours Pressure	Both Pressure
5/11/09	90 qts.	2 mo.	Shot 4	3012	1800 qts.					

GAS WELL

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Surface		12	12	El = 1004.05
Red Rock	12	214	202	about 300,000 ft
Sand	214	314	100	Gas in Salt Sand at
Slate	314	344	30	a depth of 1110 ft
Sand	344	600	256	
Slate soft	600	620	20	Hole filled with water
Sand	620	705	85	at 1195 ft, gas showed
Slate	705	720	15	out.
Sand	720	790	70	
Slate	790	865	75	Oil in top of sand
Sand	865	890	25	
Slate & Shell	890	1000	110	
Sand	1000	1085	85	
Slate Black	1085	1105	20	
Salt Sand	1105	1770	665	
Black Lime	1770	1800	30	(1800 1855 - 1755
Pencil Cave	1800	1803	3	
Big Lime	1803	1985	182	
Big Injun	1985	2035	50	
Slate & Shell	2035	2240	205	
Black Slate	2240	2465	225	
Brown Slate	2465	2487	22	
Big Sand	2487	2509	22	
Slate	2509	2511	2	

47-043-0213

WWR-38

API# 47-043-02213P

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY
DIVISION 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: David L. Litz, etux
LOCATION: Elevation: 1004.05'
District: Duval
Latitude: 13,600' South of
Longitude: 9000' West of

Operator Well No.: B.F Curnes No.1
Quadrangle: Garrett's Bond 7.5'
County: Lincoln
Deg. 38 Min. 17 Sec. 30
Deg. 81 Min. 55 Sec. 30

Well Type: Oil X Gas ____

Company: East Resources Inc.
P.O. Box 5519
Vienna, WV 26105
Agent: Philip S. Ondrusek
Inspector: Ralph Triplett
Permit Issued: 7/18/02

Coal Operator NA
or Owner ____
Coal Operator ____
or Owner ____

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Wood ss:
Bill Wade and Terry Huffman 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 East Resources Inc., well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 18th day of September ,2003, and that the well was plugged and filled in the following manner:

TYPE	FROM	TO	PIPE REMOVED	LEFT
Cement	2480'	2360'	1869' - 5172"	0
Cement	2078'	1958'		
Cement	1855'	1745'	254' - 7"	1551'
Cement	1185'	1075'	40' - 8"	200'
Cement	850'	740'		
Cement	515'	405'		
Cement	304'	190'		
Cement	100'	Surface		
6% Gel Between Cement Plugs				

Description of monument: 7" x 8'
and that the work of plugging and filling said well was completed on the 23rd day of September, 2003
And further deponents saith not.

Bill Wade
Terry Huffman

Sworn and subscribe before me this 9th day of March, 2004

My commission expires: January 9, 2012

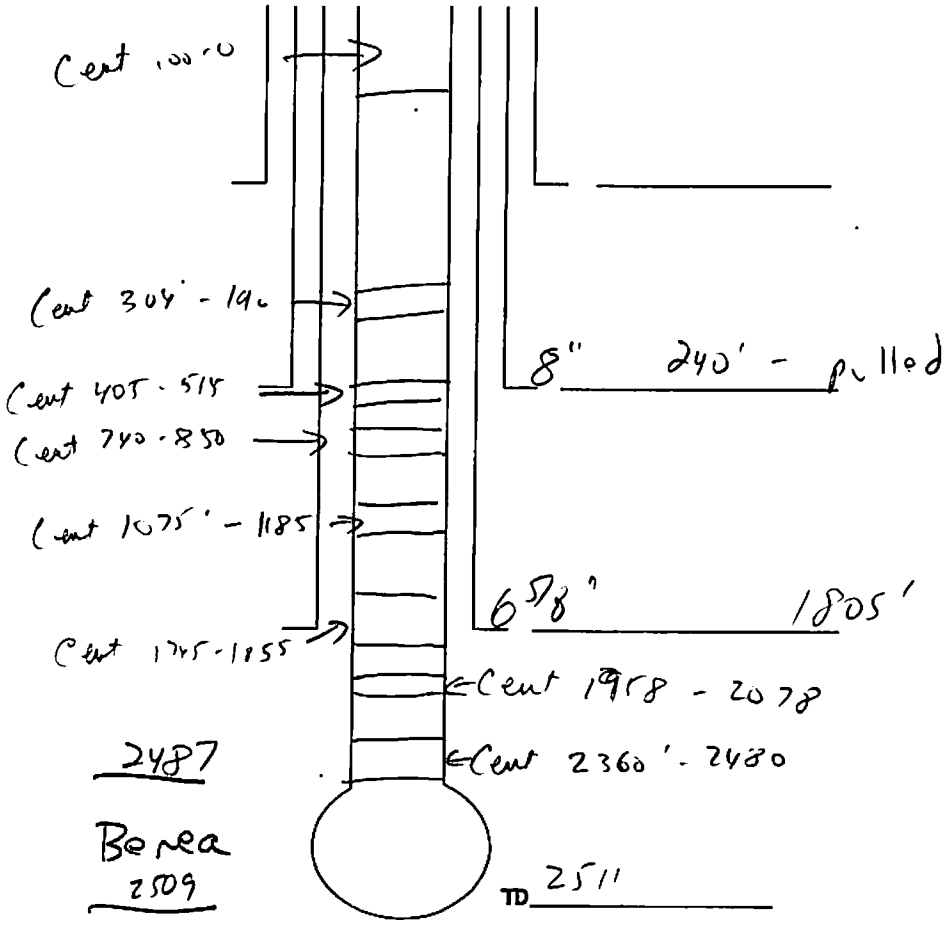
Gina M Ramsey
Notary Public

OFFICIAL SEAL
NOTARY PUBLIC
STATE OF WEST VIRGINIA
GINA M. RAMSEY
624 SOUTH CHURCH STREET
RIPLEY, WV 25271
My Commission Expires JAN. 9, 2012

B F Corres #1

Griffithsville Unit #2 Field

47-043- 0 2213



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

(63)

AOR - Well Review Checklist

API Number: 47- 043 - 30679 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 2
Farm Name: B F Cines
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2618
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 417,105 Northing: 4,234,202
Elevation: 337'
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐	
Date of Last MIT:	Passed?	No ☐	Yes ☐	
Open Hole Completion		No ☐	Yes ☒	
Well penetrates injection zone?		No ☐	Yes ☒	
Well perforated in injection zone?		No ☒	Yes ☐	
Cemented across injection zone?		No ☒	Yes ☐	
Packer immediately above injection zone (<100')?		No ☐	Yes ☐	No Packer ☐
		If No: Provide Depth:		
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒	

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:
Date Reviewed:

** Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-30679

RECORD of Well No. 2 on B. F. Barnes Farm Acres

Field, District County,

Commenced 19 Completed 19

Drilling Commenced Oct. 12 1910. Completed Nov. 3 1910

Cost per foot, 1/0 Contractor, Williams & Wilcox Address, Parkersburg, W. Va.

Drillers' Names, E. J. McClain & Allen Morrison

CONDUCTOR AND CASING USED IN DRILLING.

Conductor	13 inch	10 inch	8¼ inch	8 inch	7¼ inch	6¼ inch	6¼ inch	5¼ inch	5 inch	4¼ inch
		16				1930				

CONDUCTOR AND CASING LEFT IN WELL.

Conductor	13 inch	10 inch	8¼ inch	8 inch	7¼ inch	6¼ inch	6¼ inch	5¼ inch	5 inch	4¼ inch
		16				1930				

OIL WELL **GAS WELL**

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods	Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure
5/12/10	Qts.	2nd Sand 900 M. 32	Hub x 6½		1500				

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Pittsburg Red Rock		350	350	El=
Sand	350	570	220	10" hole drilled in to
Sand & Lime	570	775	205	570'
Big Dunkard	775	1080	305	
Gritty Lime	1080	1270	190	
Pencil	1270	1277	7	Gas at 1287
Salt Sand	1277	1880	603	
Salt	1880	1886	6	Water first gave 1245'
Little Lime	1886	1915	29	
Pencil Cave	1915	1922	7	
Big Lime	1922	2130	208	
Keener	2130	2195	65	
Sand	2195	2307	112	
Little Lime	2307	2372	65	
Pencil Cave	2372	2570	198	
Big Injun	2570	2596	26	
Berea Sand	2596	2618	22	

47-043 - 30679

FORM OG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER
ADDRESS
COAL OPERATOR OR OWNER
ADDRESS
LEASE OR PROPERTY OWNER
ADDRESS

United Fuel Gas Company
NAME OF WELL OPERATOR
Charleston, W. Va.
COMPLETE ADDRESS
May 20, 1949
WELL AND LOCATION
Duval District
Lincoln County
Well No. 2
B. F. Curnes Farm

STATE INSPECTOR SUPERVISING PLUGGING D. E. Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

Kansie Browning and E. J. Elkins, Jr. 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 R. H. Adkins well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 28 day of April, 1949, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD	FILLING MATERIAL			PLUGS USED	CASING	
FORMATION	CONTENT	FROM	TO	SIZE & KIND	CSG PULLED	CSG LEFT IN
SET A PERMANENT BRIDGE AT 2550' - 20' above Berea Sand, 2 sacks neat cement and 5' crushed stone on bridge. Filled with clay to 2450 feet. Neat cement 2350 feet - 2140 feet.						
SET A PERMANENT BRIDGE AT 2225' - 30' below Big Injun, 2 sacks neat cement and 5' crushed stone on bridge. Filled with clay to 1960' - 30' below 6-5/8" casing. Neat cement 1960' - 1950', 5' crushed stone on cement Plug. PULLED 6-5/8" CASING AS BALANCE OF HOLE WAS FILLED AND PLUGGED. Continued filling with clay to 1257' - 20' above Salt Sands. Neat Cement 1257' - 1247'.						
SET A PERMANENT BRIDGE AT 500', 2 sacks neat cement and 5' crushed stone on bridge. Filled with clay to surface. Erected marker such as is described in Rule 18, 1931 Regulations.						

COAL SEAMS	DESCRIPTION OF MONUMENT
(NAME)	U. F. GAS CO.
(NAME)	B. F. CURNES # 2
(NAME)	DATE OF ABANDONMENT
(NAME)	

JUN 6 1949
DEPARTMENT OF MINES

and that the work of plugging and filling said well was completed on the 4 day of May, 1949.

And further deponents saith not.

E. J. Elkins, Jr.
Kansie Browning

Sworn to and subscribed before me this 4 day of May, 1949.

Notary Public.

My commission expires:
Aug 4, 1957

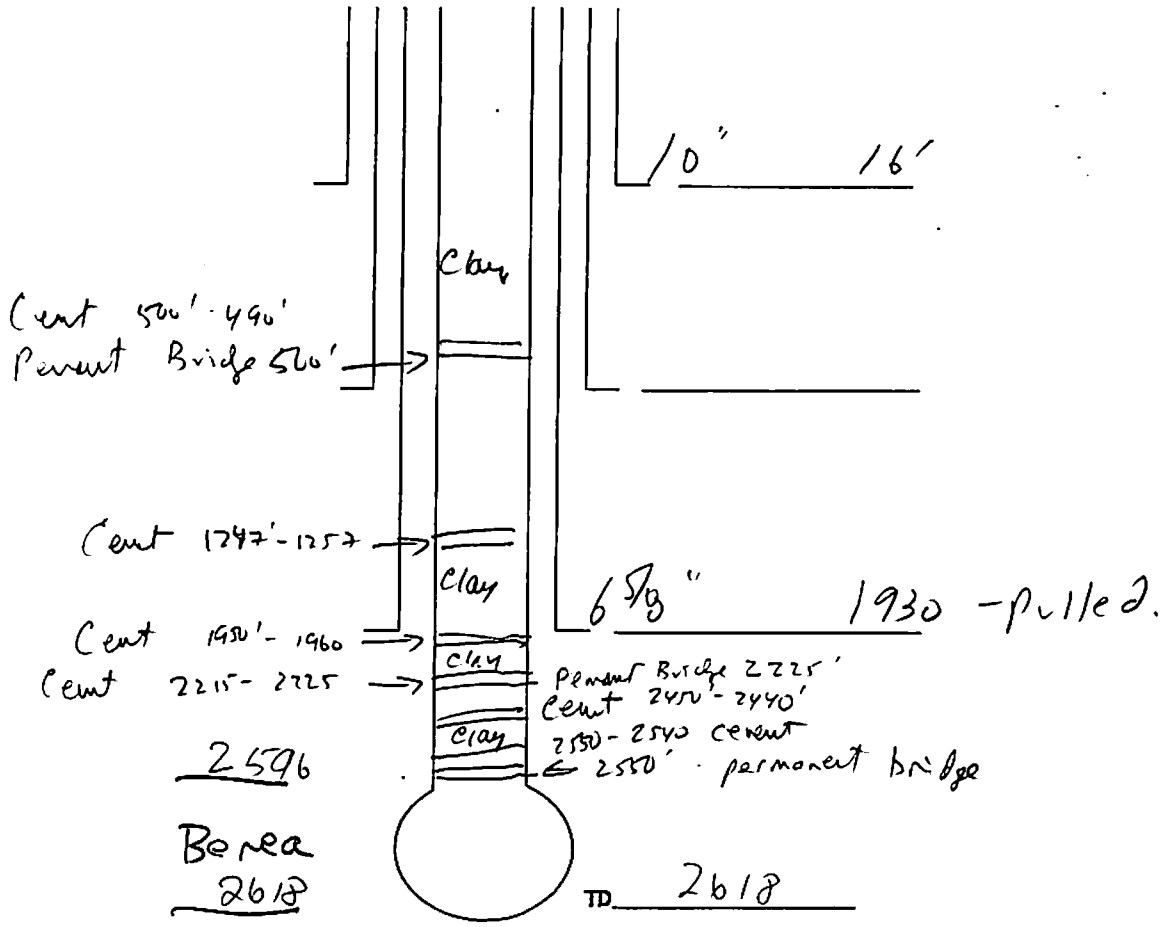
Permit No. LIN - 679

(119)

BF Corres 2

Griffithsville Unit #2 Field

47-043- 30079



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

(64)

AOR - Well Review Checklist

API Number: 47- 043 - 30407 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 3
Farm Name: B F Curnes
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2529
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 416,720 Northing: 4,234,416
Elevation: 313
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☐

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = 0
Bottom Hole Injection Pressure 0
Hydrostatic Pressure 0

Comments:

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47.043-30407

Record of Well No. 3 on B. F. Garrison Farm Acres

Field. District County.

Rig Commenced 19 Completed 19

Drilling Commenced Sept 21, 1911. Completed Nov 8 1911

Cost per foot. 11½ Contractor Yeckley & Inman Oil Co. Address, Yeckley, W. Va.

Drillers' Names, J. R. Fuller & C. A. Lewis

CONDUCTOR AND CASING USED IN DRILLING.

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7¼ Inch	6¼ Inch	6¼ Inch	6¼ Inch	5 3/16 Inch	4¼ Inch
16						1853				

CONDUCTOR AND CASING LEFT IN WELL.

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7¼ Inch	6¼ Inch	6¼ Inch	6¼ Inch	5 3/16 Inch	4¼ Inch
16						1853				

OIL WELL — Pulled - 1853' — GAS WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods		Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure
11/10/11	80 qts.									

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Soil & Clay		16	16	Cased 20' in Big Lime
Limestone	16	20	4	
Red Rock	20	100	80	
Slate	100	120	20	
Red Rock	120	180	60	
Sand	180	220	40	
Slate	220	250	30	
Sand	250	300	50	
Slate	300	320	20	380' 10" hole
Sand	320	380	60	to
Slate	380	460	80	
Sand & Slate	460	1100	640	
Slate	1100	1140	40	
Coal & Sand	1140	1795	655	Strike full flow of water at 1230
Little Lime	1795	1830	35	
Pencil Cave	1830	1833	3	
Big Lime	1833	2013	180	
Big Injun	2013	2063	50	
Slate	2063	2133	70	Abd. - 1-23-45
Lime Shells	2133	2273	140	
Slate	2273	2489	216	
Brown Shale	2489	2509	20	
Berea Sand	2509	2529	20	

47-043-30407

FORM OG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

(NO COAL) — COAL OPERATOR OR OWNER
ADDRESS
COAL OPERATOR OR OWNER
ADDRESS
W. L. Foulkes, — LEASE OR PROPERTY OWNER
Yawkey, West Va. — ADDRESS

SOUTH PENN NATURAL GAS COMPANY, — NAME OF WELL OPERATOR
Union Trust Building, Parkersburg, W. Va. — COMPLETE ADDRESS
January 23 194 45 — WELL AND LOCATION
Duval District
Lincoln County
Well No. 3
B. F. Curnes Farm

STATE INSPECTOR SUPERVISING PLUGGING Calvin Hall

AFFIDAVIT

STATE OF WEST VIRGINIA, }
County of LINCOLN } ss:

J. A. Johnson and J. H. Matthews 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 South Penn Natural Gas Co., well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 24th day of November, 194 4, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD FORMATION	FILLING MATERIAL CONTENT	FROM	TO	PLUGS USED SIZE & KIND	CASING CSG PULLED	CSG LEFT IN
Berea Sand	Clay	2529	2489	7"	1853	None
	Cement	2489	2479			
Big Injun & Big	Bridge		2093			
Lime	Clay	2093	1863			
	Cement	1863	1853			
Little Lime	Clay	1853	1775			
	Cement	1775	1765			
Salt Sand	Clay	1765	1120			
	Cement	1120	1110			
	Clay	1110	To Surface			
COAL SEAMS				DESCRIPTION OF MONUMENT		
(NAME)	No Coal			7" Casing extending 3' above surface,		
(NAME)				set in concrete with the Inscription:		
(NAME)				SPNGCo-B.F.Curnes #3 1-8-45		
(NAME)						

RECEIVED JAN 10 1945 DEPARTMENT OF MINES

and that the work of plugging and filling said well was completed on the 8th day of JANUARY, 194 45

And further deponents saith not.

J. A. Johnson
J. H. Matthews

Sworn to and subscribed before me this 27th day of January, 1945.

Notary Public.

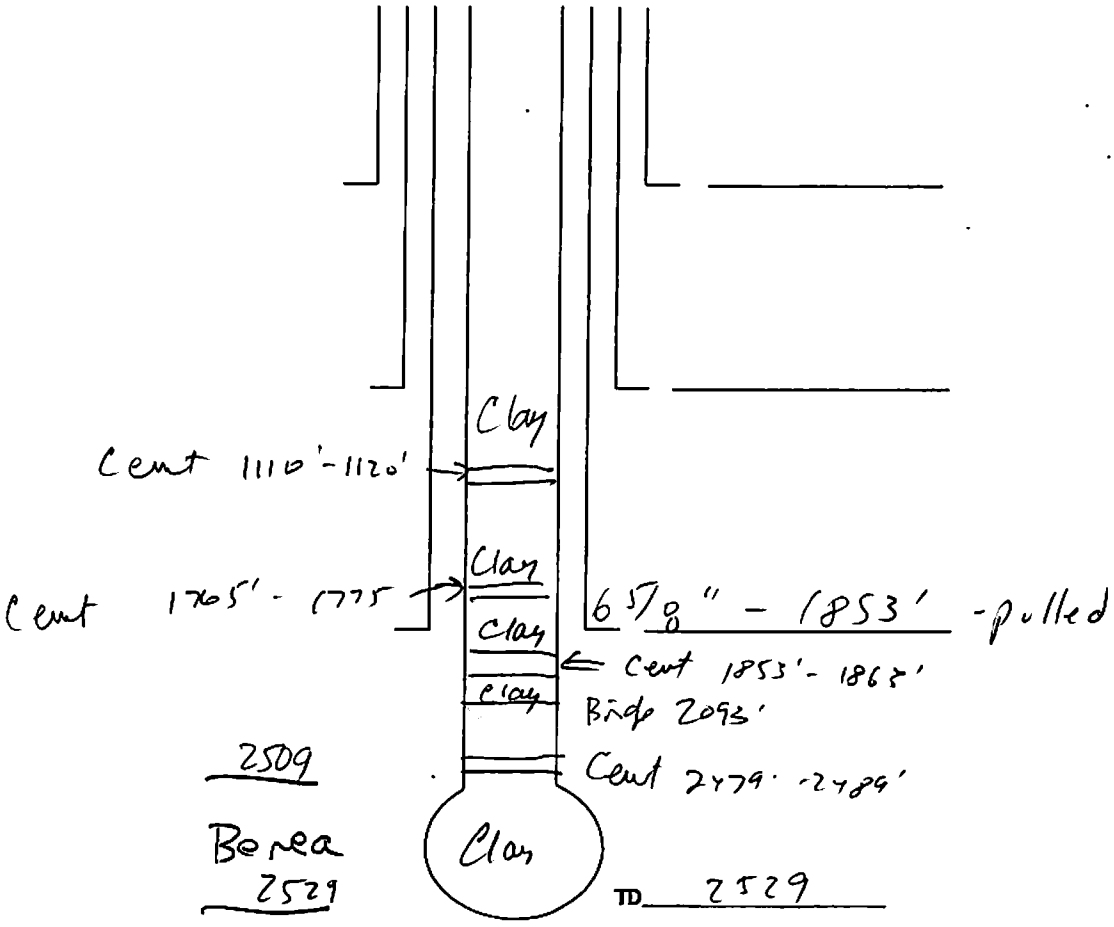
My commission expires: Dec. 7-1947

Permit No. LIN-408 407

BF Corvus 3

Griffithsville Unit #2 Field

47-043- 30407



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

65

AOR - Well Review Checklist

API Number: 47- 043 - 31267 Area Permit Number: 2R AP

Operator Name: H 6 Energy

Operator's Well #: 4

Farm Name: BF Curnel

Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐

Well Status: Active ☐ Abandoned ☐ Plugged ☒

TD of well: 2438

Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐

Easting: 416,897 Northing: 4,234,424

Elevation: 785

Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐	
Date of Last MIT:	Passed?	No ☐	Yes ☐	
Open Hole Completion		No ☐	Yes ☒	
Well penetrates injection zone?		No ☐	Yes ☒	
Well perforated in injection zone?		No ☒	Yes ☐	
Cemented across injection zone?		No ☒	Yes ☐	
Packer immediately above injection zone (<100')?		No ☐	Yes ☐	No Packer ☐
		If No: Provide Depth:		
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒	

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**

Bottom Hole Injection Pressure **0**

Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:

Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043 - 31267

RECORD of Well No. 4 on B. F. Eames Farm Acres

Field, District County

Rig Commenced 19 , Completed 19

Drilling Commenced Nov 25 1911 , Completed Jan 19 1912

Cost per foot, 15 Contractor, Hawkey & Freeman Drilling Co Address, Hawkey W. Va

Drillers' Names, S. R. Fuller and G. L. Lewis

CONDUCTOR AND CASING USED IN DRILLING

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅝ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 3-16-Inch	4⅞ Inch
10						1740				

CONDUCTOR AND CASING LEFT IN WELL

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅝ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 3-16 Inch	4⅞ Inch
10						1740				

OIL WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods
1/20/1912	80			

GAS WELL

Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressu

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Soil		10	10	Based 15' in Big Lime
Lime	10	18	8	
Red Rock	18	143	125	EI = 93505
Sand	143	168	25	
Slate	168	230	62	
Sand	230	280	50	280' of 10" hole
Slate	280	315	35	
Sand	315	415	100	
Slate	415	500	85	
Sand	500	800	300	
Slate & Lime	800	1025	225	Gas at 1030'
Salt Sand	1025	1685	660	
Little Lime	1685	1722	37	6 Bailers of Water at 1040
Pencil Cave	1722	1725	3	
Big Lime	1725	1910	185	Hole full of Water at 1120
Big Injun	1910	1960	50	
Slate	1960	2030	70	
Injun Shells	2030	2190	160	
Slate	2190	2402	212	
Brown Shale	2402	2417	15	
Berea Sand	2417	2438	21	

47-043-31267

Form OG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER
ADDRESS
COAL OPERATOR OR OWNER
ADDRESS
LEASE OR PROPERTY OWNER
ADDRESS

Pack & Jackson
NAME OF WELL OPERATOR
Hamlin, W. Va.
COMPLETE ADDRESS
November 10, 1959
WELL AND LOCATION
Duval District
Lincoln County
Well No. 4
B. F. Curnes Farm

STATE INSPECTOR SUPERVISING PLUGGING G. H. Samples - Charleston, W. Va. - Ph. DI 3-6524

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

Jerry Stephens and Roger Walls 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 Pack & Jackson well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 16 day of December, 1959, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD	FILLING MATERIAL	CASING/CHECKERS	CASING PULLED	CASING LEFT IN
FORMATION	Set permanent bridge at 2397'	2" Tubing	2432'	None
	Cement 2397' to 2387'			
	Crushed Stone 2387' to 2382'			
	Clay 2382' to 2340'			
	Set permanent bridge at 1990'			
	Cement 1990' to 1980'			
	Crushed Stone 1980' to 1975'	6-5/8" Casing	1710'	None
	Mud & Clay 1975' to 1705'			
	Cement 1705' to 1695'			
	Crushed Stone 1695' to 1690'			
	Mud & Clay 1690' to 1005'			
	Cement 1005' to 995'			
	Crushed Stone 995' to 990'			
	Set permanent bridge at 500'			
	Cement 500' to 490'			
	Crushed Stone 490' to 485'			
	Mud & Clay 485' to 3'			
	Cement 3' to surface.			
COAL SEAMS	Erected monument as prescribed by law.	DESCRIPTION OF MONUMENT		
(NAME)		30" above surface with inscription "Pack & Jackson - Well #4 - abandoned December 31, 1959"		
(NAME)				
(NAME)				
(NAME)				

RECEIVED
JAN 1960
WEST VIRGINIA
DEPT. OF MINES

and that the work of plugging and filling said well was completed on the 31 day of Dec., 1959

And further deponents saith not.

Jerry Stephens
Roger Walls

Sworn to and subscribed before me this 1 day of January, 1960.

Lloyd D. Jarvis
Notary Public.

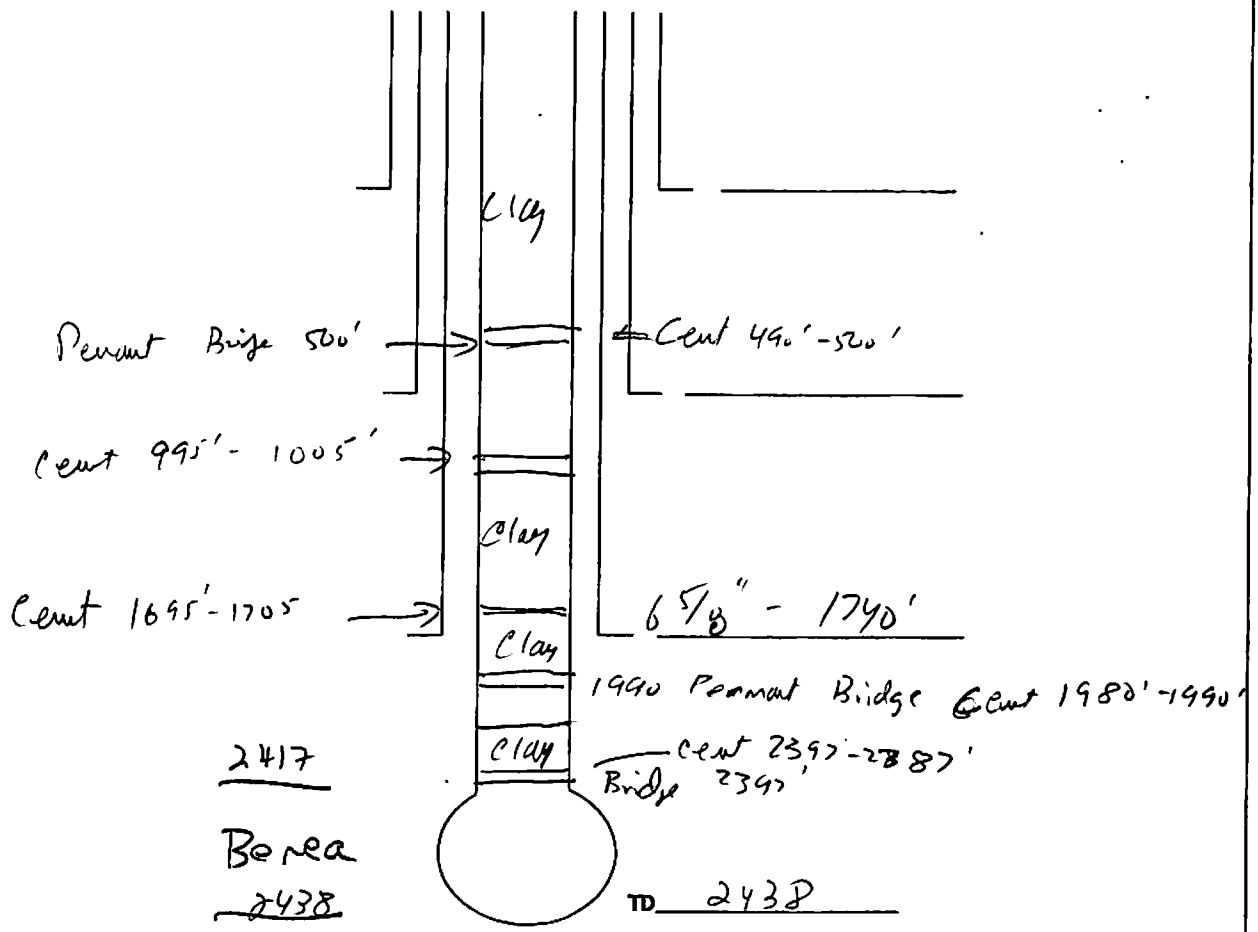
My commission expires:
4-12-64

Permit No. LIN-1267

BF Cones 4

Griffithsville Unit #2 Field

47-043- 31267



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

(66)

AOR - Well Review Checklist

API Number: 47- 043 - 30757 Area Permit Number: 2R AP

Operator Name: H 6 Energy

Operator's Well #: 5

Farm Name: B F Cones

Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐

Well Status: Active ☐ Abandoned ☐ Plugged ☒

TD of well: 2253

Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐

Easting: 416,689 Northing: 4,233,705

Elevation: 232

Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐	
Date of Last MIT:	Passed?	No ☐	Yes ☐	
Open Hole Completion		No ☐	Yes ☒	
Well penetrates injection zone?		No ☐	Yes ☒	
Well perforated in injection zone?		No ☒	Yes ☐	
Cemented across injection zone?		No ☒	Yes ☐	
Packer immediately above injection zone (<100')?		No ☐	Yes ☐	No Packer ☐
		If No: Provide Depth:		
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒	

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**

Bottom Hole Injection Pressure **0**

Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:

Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

of Well No. 5 on B. F. Conner Farm Acres

Field, District County

Commenced 19 , Completed 19

ling Commenced Aug 10 1912, Completed Dec 11 1912

et per foot, 115 Contractor, Hawkey & Wisman Post Office Address, Hawkey, W. Va.

Drillers' Names W. E. Williams & F. L. McClellan

CONDUCTOR AND CASING USED IN DRILLING

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅝ Inch	6¼ Inch	6¼ Inch	5⅝ Inch	5 3-16-Inch	4⅞ Inch
16				285'		1370				

CONDUCTOR AND CASING LEFT IN WELL

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅝ Inch	6¼ Inch	6¼ Inch	5⅝ Inch	5 3-16 Inch	4⅞ Inch
16						1370				

OIL WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods
12/12/12	80 qts			

GAS WELL

Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
		16	16	El= 751.26
Soil-Face				
Slate	16	50	34	
Coal	50	55	5	
Slate	55	100	45	
Sand	100	110	10	
Slate	110	130	20	
Sand	130	350	220	
Slate	350	385	35	
Coal	385	390	5	
Slate	390	420	30	
Sand	420	520	100	
Slate	520	600	80	
Sand	600	650	50	
Slate	650	680	30	
Sand	680	720	40	
Slate	720	890	170	Hole full of Water at 925
Salt sand	890	1520	630	
Slate	1520	1525	5	
Little Lime	1525	1555	30	
Pencil Cave	1555	1560	5	
Big Lime	1560	1745	185	
Big Injun	1745	1800	55	
Slate	1800	1860	60	
Lime Shells	1860	1980	120	
Slate	1980	2200	220	
Lime Shells	2200	2210	10	
Slate	2210	2220	10	
Brown Shale	2220	2234	14	
Berea Sand	2234	2253½	19½	

47-043-30757

47.043 - 30757

FORM OG-3

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

LEASE OR PROPERTY OWNER

ADDRESS

NAME OF WELL OPERATOR: G. S. H. Supply Company

COMPLETE ADDRESS: c/o Hallie Pack, Hamlin, West Virginia

WELL AND LOCATION: February 12, 19 51

District: Duval

County: Lincoln

Well. No. 5

Farm: B. F. Curns

STATE INSPECTOR SUPERVISING PLUGGING D. E. Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA, County of Lincoln } ss:

Roy Thompson and Kelly Adkins 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 Hal Pack, well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 1 day of January, 19 51, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD	FILLING MATERIAL			PLUGS USED	CASING	
FORMATION	CONTENT	FROM	TO	SIZE & KIND	CSG PULLED	CSG LEFT IN
	Set Bridge At	2214'		6-5/8"	1570'	None
	Neat Cement	2214'	2204'	2"	2247'	None
	Crushed Stone	5'				
	Clay		1700'			
	Neat Cement	1700'	1690'			
	Crushed Stone	5'				
	Bridge Set At	1400'				
	Neat Cement	1400'	1390'			
	Crushed Stone	5'				
	Clay		870'			
	Neat Cement	870'	850'			
	Crushed Stone	5'				
	Bridge Set At	350'				
	Neat Cement	350'	340'			
	Crushed Stone	5'				
COAL SEAMS	Sealing Fresh Water			DESCRIPTION OF MONUMENT		
(NAME)	Clay to Surface			Erected Marker According Rule 18, 1931 Regulations		
(NAME)						
(NAME)						
(NAME)						

and that the work of plugging and filling said well was completed on the 18 day of January, 19 51.

And further deponents saith not.

Roy Thompson

Kelly Adkins

Sworn to and subscribed before me this 21 day of Feb, 19 51.

Morris C Ashworth
Notary Public.

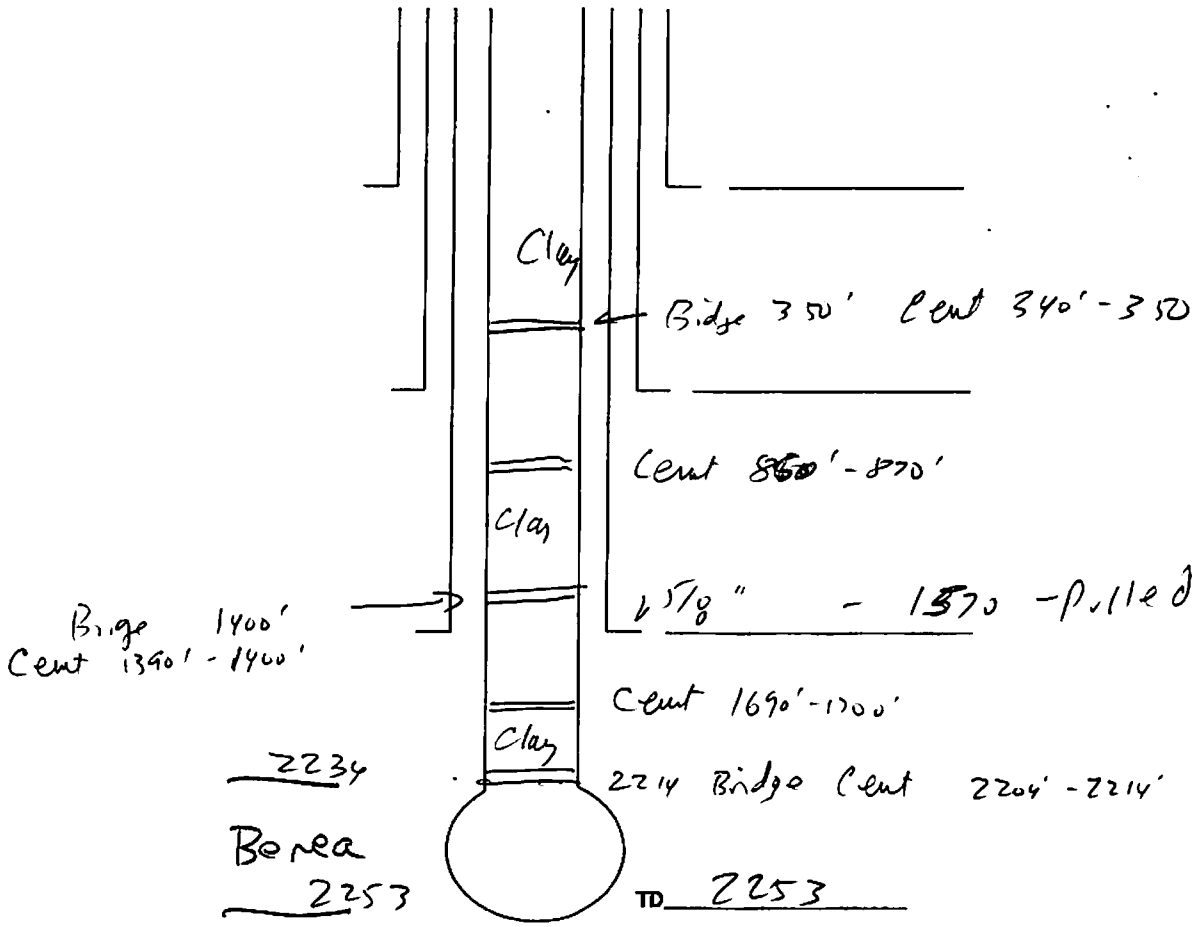
My commission expires: My Commission Expires March 17, 1954

Permit No. LXH-757-RENEWED

BF Corns 5

Griffithsville Unit #2 Field

47-043- 30757



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 8/14/16

(67)

AOR - Well Review Checklist

API Number: 47- 043 - 30937 Area Permit Number: 2R AP

Operator Name: H 6 Energy

Operator's Well #: 6

Farm Name: BF Coiner

Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☐ Producer (NonWaterflood) ☒ Observation ☐ Other ☐

Well Status: Active ☐ Abandoned ☐ Plugged ☒

TD of well: 2442

Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐

Easting: 416,664 Northing: 4,233,864

Elevation: 283

Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = 0

Bottom Hole Injection Pressure 0

Hydrostatic Pressure 0

Comments:

Reviewer Name: Signature:

Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

RD of Well No. 6 on B. Y. Connor Farm Acres

Field, District County

Commenced 19 , Completed 19

Drilling Commenced June 13 1912, Completed July 31-1912 19

Cost per foot, 1.50 Contractor, Hinckley & Thomas Drlg. Co. Address, Glasgow, Mont.

Drillers' Names

CONDUCTOR AND CASING USED IN DRILLING

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7¾ Inch	6¼ Inch	6¼ Inch	5¾ Inch	5 3-16-Inch	4¾ Inch
12						1745'				

CONDUCTOR AND CASING LEFT IN WELL

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7¾ Inch	6¼ Inch	6¼ Inch	5¾ Inch	5 3-16 Inch	4¾ Inch
12						1745'				

OIL WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods
8/1/12	80 qts			

GAS WELL

Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure
-				

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Conductor		12	12	El= 943.8
Big Rock	12	160	148	
Sand	160	200	40	
Shale	200	225	25	
Sand	225	300	75	
Coal	300	302	2	305' of 10" hole
Shale	302	322	20	
Sand	322	480	158	
Shale	480	530	50	
Sand	530	600	70	
Shale	600	650	50	
Sand	650	750	100	
Shale	750	820	70	Hole full of water at 1120'
Sand	820	870	50	
Shale	870	900	30	
Sand	900	930	30	
Shale	930	1040	110	
Salt Sand	1040	1695	655	
Little Lime	1695	1730	35	
Pencil Cave	1730	1735	5	
Big Lime	1735	1930	195	
Big Injun	1930	1970	40	
Shale	1970	2020	50	
Sqnaw	2020	2120	100	
Shale	2120	2400	280	
Broom Shale	2400	2422	22	
Berea Sand	2422	2442	20	

47-043-30937

47-043 - 30937

FORM OG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

LEASE OR PROPERTY OWNER

ADDRESS

G. S. H. Supply Company
NAME OF WELL OPERATOR
c/o Hallie Pack, Hamlin, West Virginia
COMPLETE ADDRESS
November 28 19 50

WELL AND LOCATION

Duval District
Lincoln County
Well No. 6
B. F. Carnes Farm

STATE INSPECTOR SUPERVISING PLUGGING D. E. Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

Kelly Roberts and H. S. Pack 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 Hal Pack, well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 18 day of November, 19 50, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD	FILLING MATERIAL			PLUGS USED	CASING	
FORMATION	CONTENT	FROM	TO	SIZE & KIND	CSG PULLED	CSG LEFT IN
	Bridge Set At	2402'		7"	1745'	None
	Neat Cement	2402'	2392'			
	Crushed Stone	5'				
	Clay		1775'			
	Neat Cement	1775'	1765'			
	Crushed Stone	5'				
	Bridge Set At	1500'				
	Neat Cement	1500'	1490'			
	Crushed Stone	5'				
	Clay		1020'			
	Neat Cement	1020'	1010'			
	Crushed Stone	5'				
	Bridge Set At	450'				
	Neat Cement	450'	440'			
	Crushed Stone	5'				
COAL SEAMS	Clay to surface			DESCRIPTION OF MONUMENT		
(NAME)				Erected Marker According Rule 18, 1931 Regulations		
(NAME)						
(NAME)						
(NAME)						

DEC 1950

and that the work of plugging and filling said well was completed on the 27 day of November, 19 50

And further deponents saith not.

Kelly Roberts
H S Pack

Sworn to and subscribed before me this 2 day of December, 1950.

H. S. Pack
Notary Public.

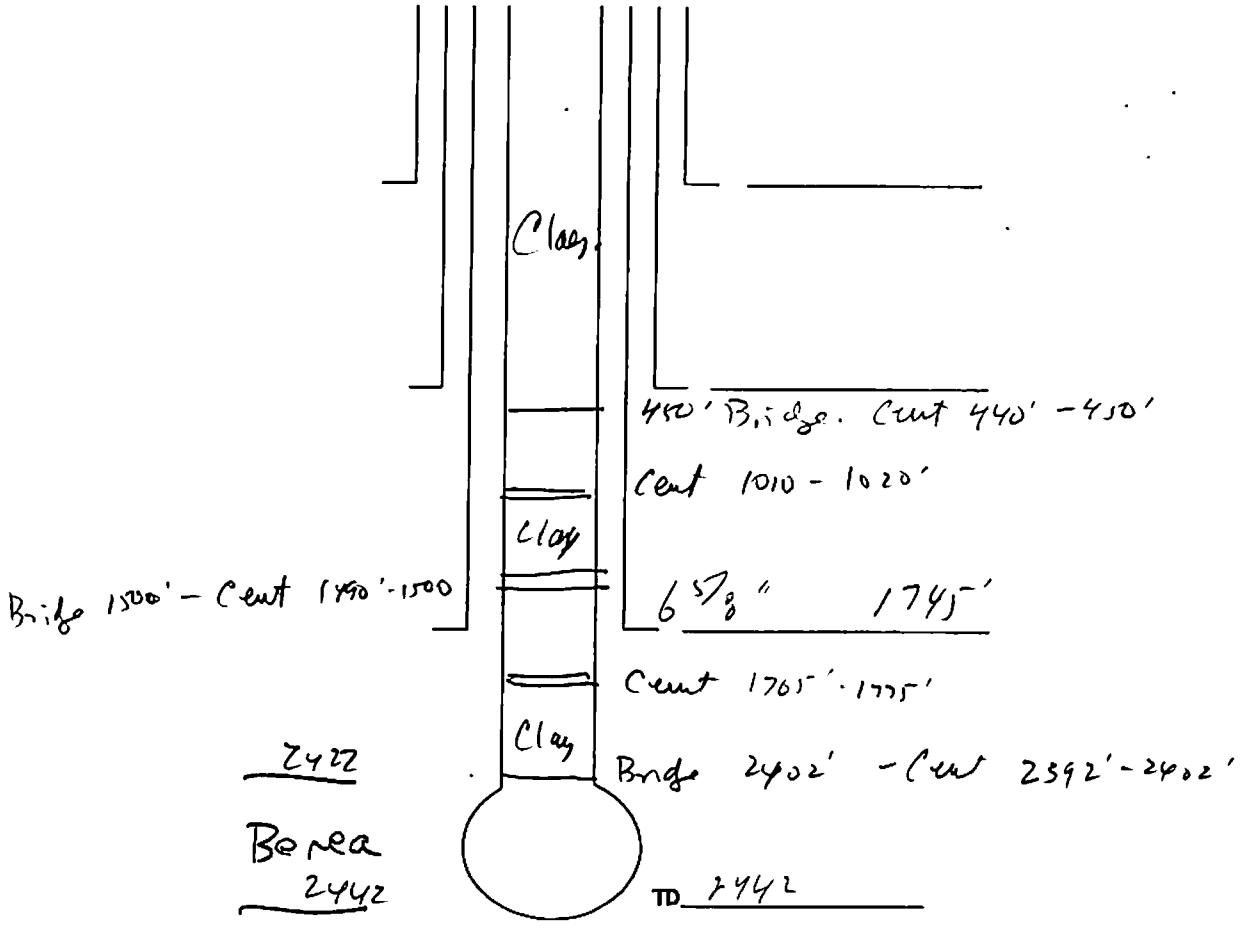
My commission expires:
April 1, 1957

Permit No. LIN-937

BF Cores 6

Griffithsville Unit #2 Field

47-043- 30937



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

68

AOR - Well Review Checklist

API Number: 47- 043 - 30733 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 7
Farm Name: BF Cornes
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☑ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2444
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 416 923 Northing: 4,233,685
Elevation: 295
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:
Date Reviewed:

** Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043 - 30733

RECORD of Well No. 7 on B. F. Lemmer Farm Acres

Field, District County

Rig Commenced 19 , Completed 19

Drilling Commenced Jan 12 1914, Completed Mch 3 1914

Cost per foot, 1½ Contractor Hawkey & Freeman Drl Co. Address, Hawkey W. Va.

Drillers' Names E. L. Stillwagon & W. W. Caterfield

CONDUCTOR AND CASING USED IN DRILLING

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅝ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 3-16-Inch	4⅛ Inch
15'						1735'				

CONDUCTOR AND CASING LEFT IN WELL

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅝ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 3-16 Inch	4⅛ Inch
15'						1735'				

OIL WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods
2/14	80 qts			

GAS WELL

Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Conductor		15	15	E.
Slate	15	100	85	
Sand	100	140	40	
Slate	140	200	60	
Sand	200	250	50	
Slate	250	350	100	
Sand	350	450	100	
Slate	450	500	50	
Sand	500	590	90	350' 10" hole
Slate	590	715	125	
Sand	715	815	100	
Slate	815	915	100	
Sand	915	995	80	
Slate	995	1030	35	
Salt Sand	1030	1680	650	Hole full of Water at 1130'
Little Lime	1680	1715	35	
Pencil Cave	1715	1722	7	
Big Lime	1722	1912	190	
Big Injun	1912	1982	70	
Slate	1982	2050	68	
Keener Shells	2050	2170	120	
Slate	2170	2378	208	
Injun Shells	2378	2408	30	
Izzum Shale	2408	2425½	17½	
Berea Sand	2425½	2444½	19	

47-043-30733

FORM OG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

LEASE OR PROPERTY OWNER

ADDRESS

G.S & H Supply Company
NAME OF WELL OPERATOR

P.O. Box 325 Tulsa, Oklahoma
COMPLETE ADDRESS

May 25 19 49
WELL AND LOCATION

Duval District

Lincoln County

Well No. 7

B.F. Curnes Farm

STATE INSPECTOR SUPERVISING PLUGGING Dana K. Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

Hyatt Chapman and Joe Jard

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 G.S & H Supply Company, well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 18 day of May, 19 49, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD		FILLING MATERIAL		PLUGS USED	CASING	
FORMATION	CONTENT	FROM	TO	SIZE & KIND	CSG PULLED	CSG LEFT IN
	Cement & rock	2390	2380	Per. Bridge		
	red clay	2380	2280			
	cement & rock	1980	1970	" "		
	red clay	1970	1750			
	cement & rock	1750	1710	" "		
	cement & rock	1100	1035	" "		
	red clay	1035	1005			
	cement & rock	1005	995	" "		
	cement & rock	250	240	" "		
	red clay	240	00			
					5½"-1638'	None
					7"- 1721'	20'

COAL SEAMS	DESCRIPTION OF MONUMENT
(NAME)	Cement Block
(NAME)	G.S & H.
(NAME)	5-25-49
(NAME)	Curnes # 7

and that the work of plugging and filling said well was completed on the 25 day of May, 19 49.

And further deponents saith not.

Hyatt Chapman
Joe Jard

Sworn to and subscribed before me this 28 day of May, 1949.

J R Osborne
Notary Public.

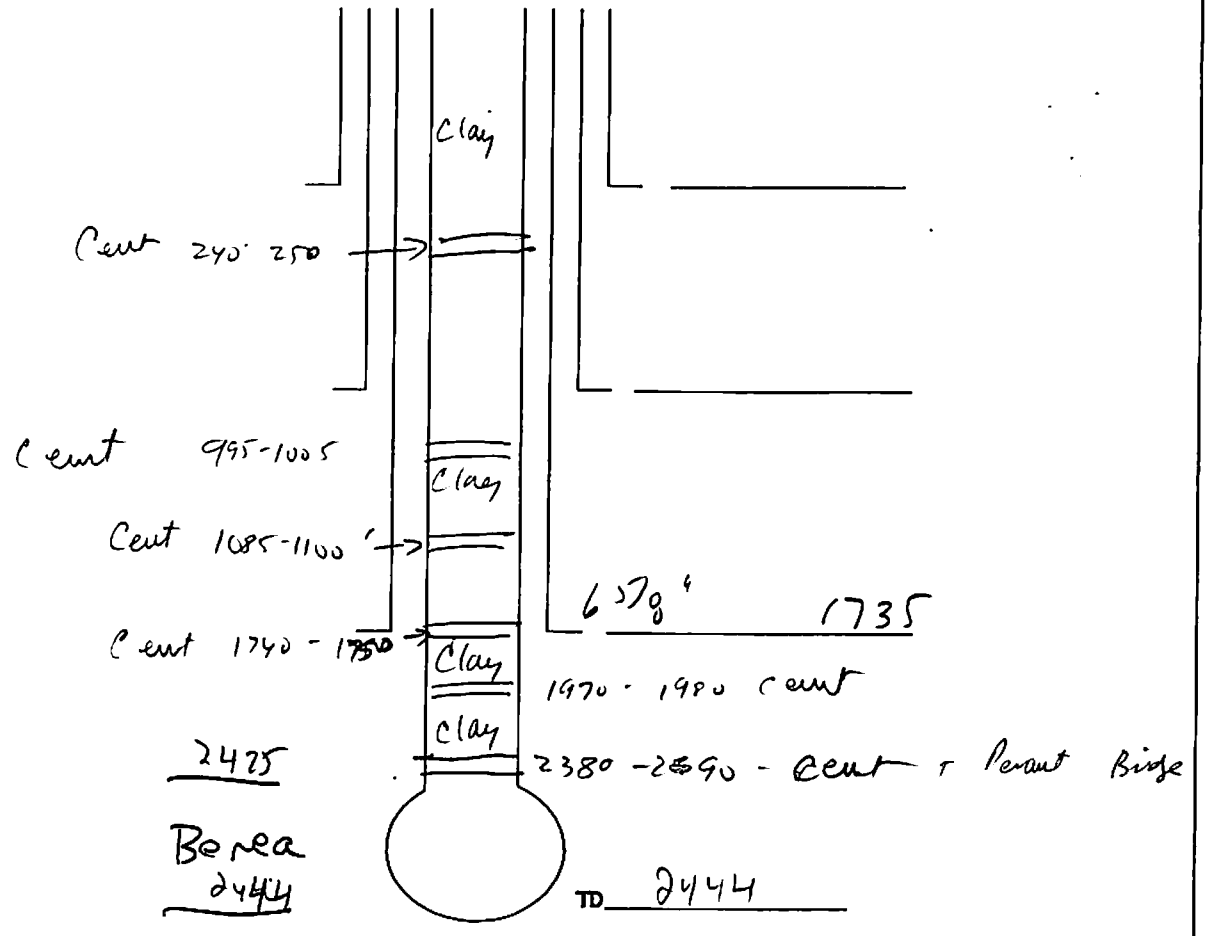
My commission expires:
10-7-57

Permit No. Lin-733

BF Conos 7

Griffithsville Unit #2 Field

47-043- 30733



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

(69)

AOR - Well Review Checklist

API Number: 47- 043 - 30677 P Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 8
Farm Name: BF Cones
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2301
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: Northing:
Elevation:
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043 - 30678

RECORD of Well No. 8 on B. F. Barnes Farm Acres

Field, District County

Rig Commenced 19, Completed 19

Drilling Commenced Sept 18 1916 Completed Oct 19 1916

Cost per foot, 1.15 Contractor, Bone Drilling Co. Address, Glenville, W. Va.

Drillers' Names J. H. Hawes & A. A. Delong

CONDUCTOR AND CASING USED IN DRILLING

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅝ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 3-16-Inch	4⅝ Inch
11				300		1620				

CONDUCTOR AND CASING LEFT IN WELL

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅝ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 3-16 Inch	4⅝ Inch
11						1620				

OIL WELL / GAS WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods		Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure
10/21/16	80 qts.									

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Soil		11	11	G.= 904 +-
Sand	11	61	50	
Slate	61	100	39	Hole full fresh water
Sand	100	500	400	at 120'
Slate	500	550	50	
Sand	550	800	250	
Slate	800	870	70	Hole full salt water at
Sand	870	900	30	990'
Slate	900	925	25	
Salt Sand	925	1550	625	Shot 8/21/16 - 60 qts. Bess Bird
Maxon Sand	1550	1570	20	
Slate	1570	1575	5	
Black Lime	1575	1605	30	
Pencil Cave	1605	1615	10	
White Lime	1615	1805	190	
Injun Sand	1805	1873	68	
Slate	1873	1933	60	
Shells	1933	2083	150	
Slate	2083	2262	179	
Brown Shale	2262	2282	20	
Lima Grit	2282	2301	19	

47.043 - 30678

FORM OG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE. ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER
ADDRESS
COAL OPERATOR OR OWNER
ADDRESS
LEASE OR PROPERTY OWNER
ADDRESS

United Fuel Gas Company — NAME OF WELL OPERATOR
Charleston, W. Va. — COMPLETE ADDRESS
August 29, 1949 — 19 — WELL AND LOCATION
Duval — District
Lincoln — County
Well No. 8
B. F. Curnes — Farm

STATE INSPECTOR SUPERVISING PLUGGING D. E. Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

E. J. Elkins, Jr. and Kenzie Browning 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 R. H. Adkins well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 18 day of May, 19 49, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD — FORMATION	FILLING MATERIAL — CONTENT	FROM	TO	PLUGS USED — SIZE & KIND	CASING — CSG PULLED	CSG LEFT IN
SET A PERMANENT BRIDGE AT 2262' and 5' crushed stone on bridge.	- 20' above Berea Sand. Filled with clay to 2160'.			2 sacks neat cement Neat Cement		
2160' - 2150'.						
SET A PERMANENT BRIDGE AT 1903' and 5' crushed stone on bridge.	- 30' below Big Injun. Filled with clay to 1686'.			2 sacks neat cement - 30' below		
5-3/16" casing. Neat cement 1686' 0 1676'.				5' crushed stone on cement plug.		
PULLED 5-3/16" CASING.						
PULLED 6-5/8" CASING AS BALANCE OF HOLE WAS FILLED AND PLUGGED.						
Continued filling with clay to 905' - 20' above Salt Sands.				Neat cement		
905' - 895'.						
SET A PERMANENT BRIDGE AT 300'. 2 sacks neat cement and 5' crushed stone on bridge. Filled with clay to surface. Erected marker such as is described in Rule 18, 1931 Regulations.						

COAL SEAMS
(NAME)
(NAME)
(NAME)
(NAME)

DESCRIPTION OF MONUMENT
W. F. G. Co.
Well # 8, B. F. Curnes
Date of Abandonment

and that the work of plugging and filling said well was completed on the 25 day of May, 1949.

And further deponents saith not: E. J. Elkins Jr. Kenzie Browning

Sworn to and subscribed before me this 29 day of Aug., 1949.

Notary Public.

My commission expires: Apr 1, 1957

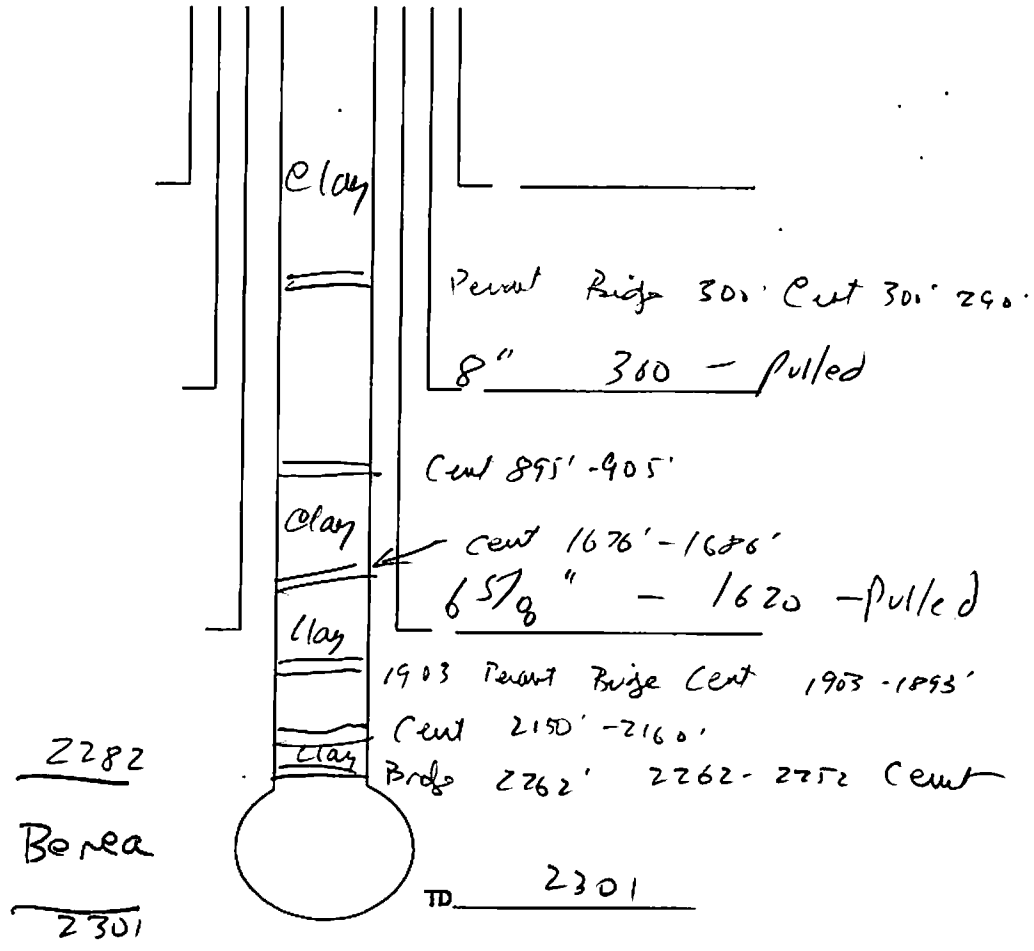
Permit No. LIN-678

(12)

BF Cunes 8

Griffithsville Unit #2 Field

47-043- 30678



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

70

AOR - Well Review Checklist

API Number: 47- 043 - 30741 Area Permit Number: 2R AP

Operator Name: H 6 Energy

Operator's Well #: 9

Farm Name: B F Cures

Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐

Well Status: Active ☐ Abandoned ☐ Plugged ☒

TD of well: 2284

Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐

Easting: Northing:

Elevation:

Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**

Bottom Hole Injection Pressure **0**

Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:

Date Reviewed:

** Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

ID of Well No. 9 on U. T. Leonard Farm Acres

Field, Graffenried District Dorcas County Lincoln

Commenced ..... 19 ..... Completed ..... 19 .....

Drilling Commenced July 26 1916 Completed Sept 1 1916

Cost per foot, 12½ Contractor, Boone Drilling Co. Address,

Drillers' Names J. H. Haines & L. P. Storm

CONDUCTOR AND CASING USED IN DRILLING

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7¼ Inch	6¼ Inch	6¼ Inch	5¼ Inch	5 3-16-Inch	4¼ Inch
11				298		1590				

CONDUCTOR AND CASING LEFT IN WELL

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7¼ Inch	6¼ Inch	6¼ Inch	5¼ Inch	5 3-16 Inch	4¼ Inch
11						1590				

OIL WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods
9/4/16	80 qts			

GAS WELL

Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Soil		11	11	El = 776'
Sand	11	60	49	Hole full water 40'
Slate	60	75	15	
Sand	75	100	25	
Slate	100	130	30	
Sand	130	170	40	
Slate	170	195	25	
Sand	195	295	100	
Slate	295	315	20	
Sand	315	375	60	Hole full salt water 985'
Slate	375	405	30	
Sand	405	485	80	
Slate	485	515	30	
Sand	515	575	60	
Slate	575	600	25	
Sand	600	640	40	
Slate	640	715	75	
Sand	715	815	100	
Slate	815	850	35	
Lime Shells	850	900	50	
Salt Sand	900	1540	640	
Black Lime	1540	1575	35	
Pencil Cave	1575	1580	5	
Big Lime	1580	1765	185	
Big Injun	1765	1825	60	
Slate	1825	1900	75	
Shells	1900	2025	125	
Slate	2025	2243	218	
Brown Shale	2243	2263	20	
Berea Grit	2263	2284	21	

47-045-30741

47-043-30741

FORM OG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

LEASE OR PROPERTY OWNER

ADDRESS

NAME OF WELL OPERATOR: G,S & H Supply Company

COMPLETE ADDRESS: P.O. Box 905 Tulsa, Oklahoma

June 4, 1942

WELL AND LOCATION: Duval District, Lincoln County

Well No. 2

B.F. Curnes Farm

STATE INSPECTOR SUPERVISING PLUGGING: Dana E Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA, }
County of Wyatt Chapman and Joe Ward } ss:

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 G,S & H Supply Company, well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 27 day of May, 1942, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD	FILLING MATERIAL			PLUGS USED	CASING	
FORMATION	CONTENT	FROM	TO	SIZE & KIND	CSG PULLED	CSG LEFT IN
	cement & rock	1950	1930	Per. Bridge		
	red clay	1930	1620			
	cement & rock	1620	1610	" "		
	cement & rock	625	615	" "		
	red clay	615	250			
	cement & rock	250	240	" "		
	red clay	240	0			
					8-1619'	none
					7"-625'	365'

COAL SEAMS

(NAME)
(NAME)
(NAME)
(NAME)

DESCRIPTION OF MONUMENT: Cement Block
G,S & H.
Curnes # 2
6-5-42

RECEIVED JUN 10 1942 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 12 1949 DEPT. OF MINES

and that the work of plugging and filling said well was completed on the 7 day of June, 1942.

And further deponents saith not.

Wyatt Chapman
Joe Ward

Sworn to and subscribed before me this 7 day of June, 1942.

J R Osborne
Notary Public.

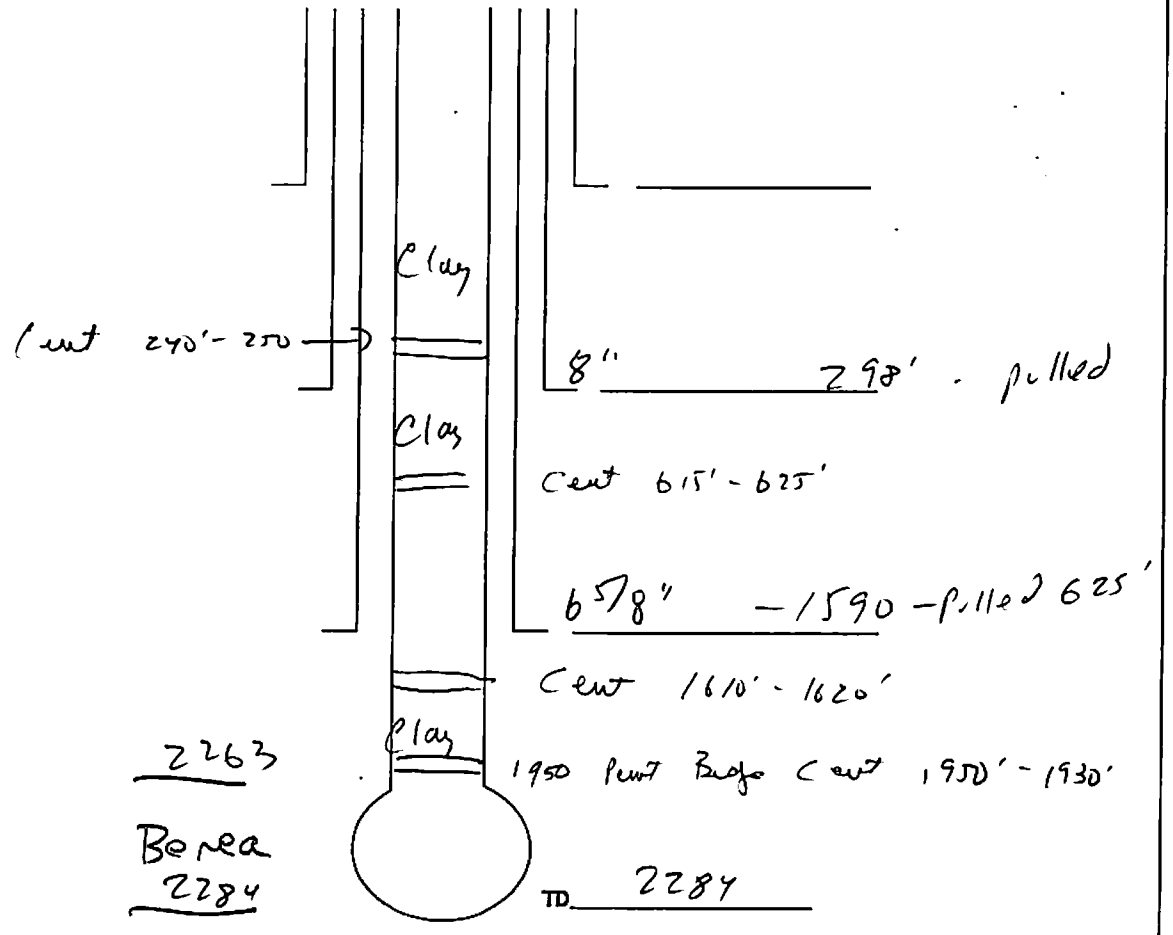
My commission expires: Oct 9-1957

Permit No. A47-741

BF Cones 9

Griffithsville Unit #2 Field

47-043- 30741



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

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AOR - Well Review Checklist

API Number: 47- 043 - 30664 Area Permit Number: 2R AP

Operator Name: H 6 Energy

Operator's Well #: 10

Farm Name: B F Curry

Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐

Well Status: Active ☐ Abandoned ☐ Plugged ☒

TD of well: 2469

Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐

Easting: 1,416,992 Northing: 14,234,078

Elevation: 290

Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**

Bottom Hole Injection Pressure **0**

Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:

Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-30064

RECORD of Well No. 10 on U. Y. Conner Farm ... Acres

... Field, ... District ... County ...

Rig Commenced ... 19..., Completed ... 19...

Drilling Commenced May 2 1914, Completed Sept 8 1914

Cost per foot, 11½ Contractor, Hawley & Summers Drlg Address, Graysville Ind.

Drillers' Names L. E. Gillespie & W. M. Cartwright

CONDUCTOR AND CASING USED IN DRILLING

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅝ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 3-10-Inch	4½ Inch
14						1790				

CONDUCTOR AND CASING LEFT IN WELL

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅝ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 3-10 Inch	4½ Inch
14						1790				

OIL WELL — GAS WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods		Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure
9/10/15	80 qts.									

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Conductor		14	14	
Sand	14	34	20	
Red Rock	34	100	66	304' 10" hole
Sand	100	150	50	
Slate	150	250	100	
Lime	250	300	50	
Coal	300	304	4	
Slate	304	429	125	Hole full of Water at 1120
Sand	429	700	271	
Slate	700	800	100	
Sand	800	900	100	
Slate	900	1020	120	
Salt Sand	1020	1740	720	
Little Lime	1740	1775	35	
Pencil Cave	1775	1780	5	
Big Lime	1780	1960	180	
" Injun	1960	2020	60	
Slate	2020	2100	80	
Large Shells	2100	2200	100	
Slate	2200	2432	232	Stopped in slate above
Shale	2432	2449	17	Sand. on June 23-1914
Berea Sand	2449	2469	20	

47-043-30664

FORM OG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER: _____
ADDRESS: _____
COAL OPERATOR OR OWNER: _____
ADDRESS: _____
LEASE OR PROPERTY OWNER: _____
ADDRESS: _____

NAME OF WELL OPERATOR: United Fuel Gas Company
COMPLETE ADDRESS: Charleston, W. Va.
WELL AND LOCATION: August 29, 1949 19____
Duval District
Lincoln County
Well No. 10
B. F. Curnes Farm
STATE INSPECTOR SUPERVISING PLUGGING: D. E. Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

E. J. Elkins, Jr. and Kenzie Browning 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 R. H. Adkins well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 5 day of May, 1949, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD	FILLING MATERIAL			PLUGS USED	CASING	
FORMATION	CONTENT	FROM	TO	SIZE & KIND	CSG PULLED	CSG LEFT IN
SET A PERMANENT BRIDGE AT 2429' - 20' above Berea Sand. 2 sacks neat cement and 5' crushed stone on bridge. Filled with clay to 2300' - 2290'. 5' crushed stone on cement plug.						
SET A PERMENENT BRIDGE AT 2020' - bottom of Big Injun. 2 sacks neat cement and 5' crushed stone on bridge. Filled with clay to 1850' - 20' below 5-3/16 casing Neat cement 1850' - 1840'. 5' crushed stone on cement plug.						
PULLED 5-3/16" casing.						
PULLED 6-5/8" casing (1790') AS BALANCE OF HOLE WAS FILLED AND PLUGGED. Filled with clay to 1000' - 20' above Salt Sands. Neat cement 1000' - 990'						
SET A PERMANENT BRIDGE AT 300'. 2 sacks neat cement and 5' crushed stone on bridge. Filled with clay to surface.						
Erected marker such as is described in Rule 18 1931 Regulations						

COAL SEAMS
(NAME)
(NAME)
(NAME)
(NAME)

DESCRIPTION OF MONUMENT
U. F. G. Co.
Well # 10, B. F. Curnes
Date of abandonment

and that the work of plugging and filling said well was completed on the 17 day of May, 1949.

And further deponents saith not.

E. J. Elkins Jr.
Kenzie Browning

Sworn to and subscribed before me this 29 day of August, 1949.

J. S. Murray
Notary Public.

My commission expires:
April 1, 1957

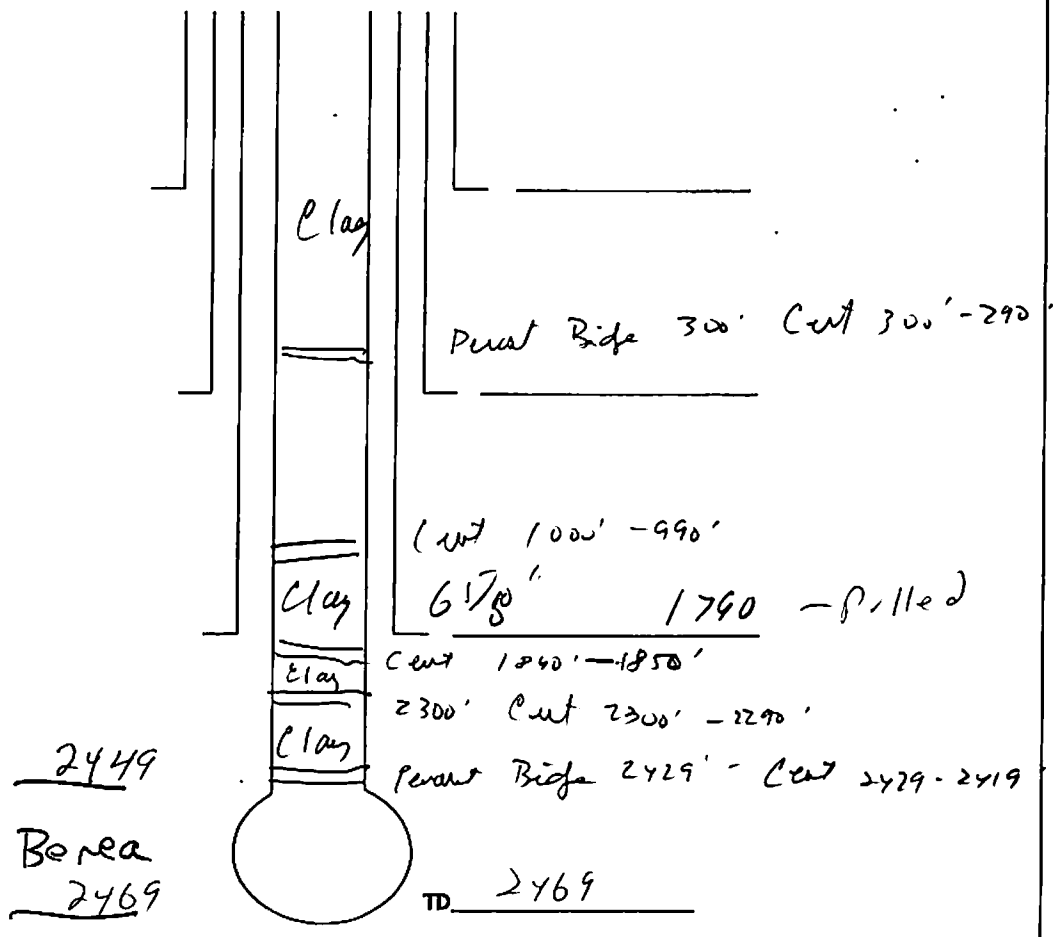
Permit No. LIN-664

(12-1)

B F Corvis 10

Griffithsville Unit #2 Field

47-043- 30664



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

(72)

AOR - Well Review Checklist

API Number: 47- 043 - 02214 Area Permit Number: 2R AP

Operator Name: HGE

Operator's Well #: 10

Farm Name: BF Curnes

Field Name: Critchfield #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☐ Producer (NonWaterflood) ☒ Observation ☐ Other ☐

Well Status: Active ☒ Abandoned ☐ Plugged ☐

TD of well: 4142

Completion Zones: Dev Shale Perforated Interval: 3506 - 3916

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐

Easting: 416,935 Northing: 4,234,262

Elevation: 878

Inside Field Boundary? ☐ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT: _____	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☒	Yes ☐
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☐	Yes ☒
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	_____
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**

Bottom Hole Injection Pressure **0**

Hydrostatic Pressure **0**

Comments:

Drilled Deep to Shale 5 1/2" csng set below Berea

Reviewer Name: _____ Signature: _____

Date Reviewed: _____

** Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47.043-00214

RECORD of Well No. 11 on B. F. Barnes Farm ... Acres ...

Field, ... District ... County ...

Rig Commenced ... 19..., Completed ... 19...

Drilling Commenced Dec 8 1915 Completed Jan 11 1916

Cost per foot, 1½ Contractor, Bone Drilling Co Address, Glenhey, W. Va.

Drillers' Names J. H. Hanes & W. H. Fronbach.

CONDUCTOR AND CASING USED IN DRILLING

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7¾ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 3-16-Inch	4⅜ Inch
16						1730				

CONDUCTOR AND CASING LEFT IN WELL

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7¾ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 3-16 Inch	4⅜ Inch
16						1730				

OIL WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods
1/13/16	80 qts			

GAS WELL

Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Soil		16	16	
Sand	16	65	49	
Slate	65	100	35	
Red Rock	100	120	20	
Sand	120	200	80	Reamed hole from 10" to 8" at
Slate	200	280	80	410'
Sand	280	410	130	
Slate	410	650	240	Hole full of Salt Water
Sand	650	950	300	at 1090'
Slate	950	1015	65	
Izett Sand	1015	1690	675	
Slate Lime	1690	1720	30	
Little Lime	1720	1726	6	
Pencil Cave	1726	1906	180	
Big Lime	1906	1966	60	
Injun Sand	1966	2380	414	
Slate & Shells	2380	2400	20	
Berea Shale	2400	2422	22	
Total depth	2425'			

R-35

6-May-03

API # 47 043 02214

State of West Virginia
Division of Environmental Protection
Section of Oil and Gas

Well Operator's Report of Well Work

COPY

arm name: East Resources Inc

Operator Well No.: B F Curnes 11

OCATION: Elevation: 917.63'

Quadrangle: Griffitsville 7.5'

District: Duval

County: Lincoln

Latitude: 14,225 Feet south of 38 Deg 17 Min 30 Sec.

Longitude: 9,400 Feet west of 81 Deg 55 Min 00 Sec.

:ompany: EAST RESOURCES, INC.
P.O. BOX 5519
VIENNA, WV 26105-5519

\gent: MICHAEL MCCOWN

nspector: Ralph Triplett

?ermit Issued: 05/06/03

Well work Commenced: 06/09/03

Well work Completed: 07/02/03

Verbal plugging
permission granted on: _____

Rotary X Cable _____ Rig

Tot' Depth (feet) 4142'

Fre. water depths (ft) NA

Salt water depths (ft) NA

Is coal being mined in area (Y/N) N

Coal Depths (ft): NA

Casing & Tubing	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
Size			
6 5/8"	1730'	1730'	Existing
5 3/8"	2445'	2445'	Existing
3 1/2"	4095'	4095'	50 sks

OPEN FLOW DATA

Producing formation Devonian Shale Pay zone depth (ft) 3506'-3916'

Gas: Initial open flow 0 MCF/d Oil: Initial open flow _____ Bbl/d

Final open flow 253 MCF/d Final open flow _____ Bbl/d

Time of open flow between initial and final tests _____ Hours

Static rock pressure 310 psig (surface pressure) after 24 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: EAST RESOURCES, INC

By: _____

Date: 7/16/03

B. F. Cons 411 47-043-0.2.214

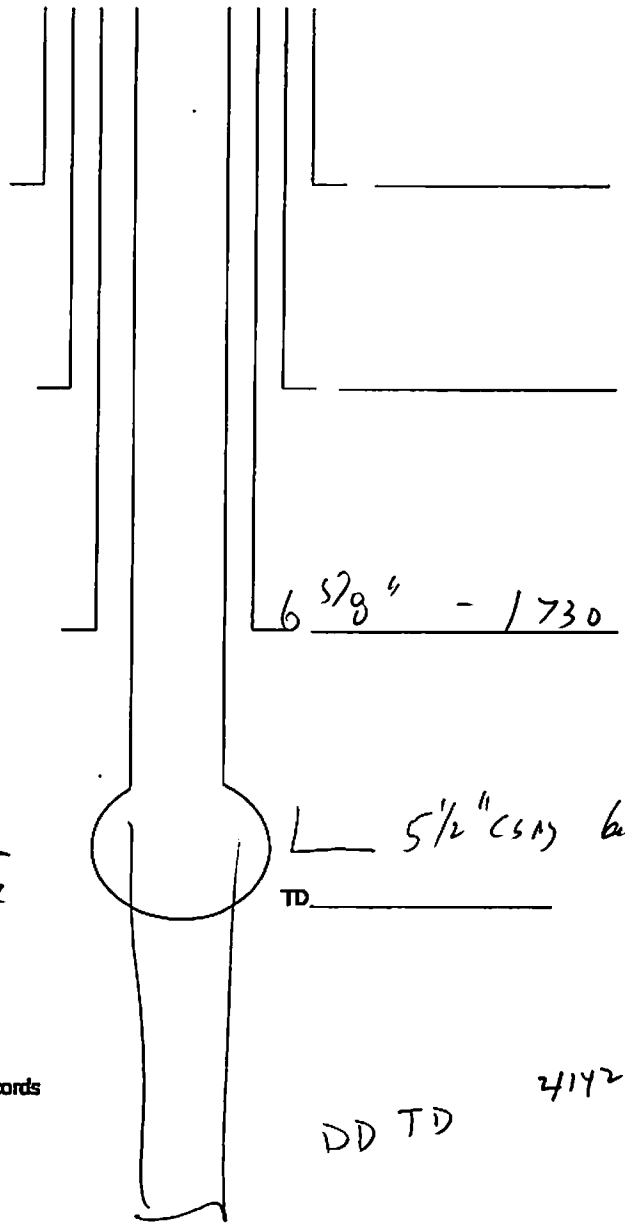
Treatment : Perfs: 3506'-3916 - treated w/ 500 gal 7.5% HCL, 647 bbls foam and 43,500 # 20/40 sand

Well Log : Drilled deeper 2422'-4142'- Devonian shale

B F Cunnos II

Griffithsville Unit #2 Field

47-043- 02214



From Drillers Records/Plugging Records

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(73)

AOR - Well Review Checklist

API Number: 47- 043 - 30665 Area Permit Number: 2R AP

Operator Name: H 6 Energy

Operator's Well #: 12

Farm Name: B F Curnes

Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐

Well Status: Active ☐ Abandoned ☐ Plugged ☒

TD of well: 2492

Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐

Easting: Northing:

Elevation:

Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐	
Date of Last MIT:	Passed?	No ☐	Yes ☐	
Open Hole Completion		No ☐	Yes ☒	
Well penetrates injection zone?		No ☐	Yes ☒	
Well perforated in injection zone?		No ☒	Yes ☐	
Cemented across injection zone?		No ☒	Yes ☐	
Packer immediately above injection zone (<100')?		No ☐	Yes ☐	No Packer ☐
		If No: Provide Depth:		
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒	

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**

Bottom Hole Injection Pressure **0**

Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:

Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-30645

FORM OG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

LEASE OR PROPERTY OWNER

ADDRESS

United Fuel Gas Company
NAME OF WELL OPERATOR
Charleston, W. Va.
COMPLETE ADDRESS
May 20 1949
WELL AND LOCATION
Duval District
Lincoln County
Well No. 12
B. F. Curnes Farm

STATE INSPECTOR SUPERVISING PLUGGING D. E. Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

E. J. Elkins, Jr. and Clyde Satterfield 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 R. H. Adkins, well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 5 day of May, 1949, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD FORMATION	FILLING MATERIAL CONTENT	FROM	TO	PLUGS USED SIZE & KIND	CASING CSG PULLED	CSG LEFT IN
Set a Permandnet Bridge at 2453' - 20' above Berea Sand. 2 sacks neat cement and 5' crushed stone on bridge. Filled with clay to 2353'. Neat Cement 2353' - 2343.						
Set a Permanent Bridge at 2030' - bottom of Big Injun. 2 sacks neat cement and 5' crushed stone on bridge. Filled with clay to 1825' - 30' below 6-5/8" casing. Neat cement 1825' - 1815'. 5' crushed stone on cament Plug.						
PULLED 6-5/8" CASING AS BALANCE OF HOLE WAS FILLED AND PLUGGED.						
Continued filling with clay to 1070' - 20' above Salt Sands. Neat Cement 1070' to 1060'.						
SET A PERMANENT BRIDGE AT 300'. 2 sacks neat cement and 5' crushed stone on bridge. Filled with clay to surface. Erected marker such as is described in Rule 18, 1931 Regulations.						
COAL SEAMS				DESCRIPTION OF MONUMENT		
(NAME)				U. F. GAS CO.		
(NAME)				B. F. CURNES # 12		
(NAME)				DATE OF ABANDONMENT		
(NAME)						

and that the work of plugging and filling said well was completed on the 9 day of April, 1949.

And further deponents saith not.

R. H. Adkins Jr.
Clyde Satterfield

Sworn to and subscribed before me this 9 day of April, 1949.

Notary Public.

My commission expires:
Sept. 1, 1957

Permit No. LIN-665

(122)

RD of Well No. 12 on U. T. S. corner Farm Acres

Field, Sistersville District Grant County Tyler

g Commenced 19 , Completed 19

Drilling Commenced June 25 1916, Completed March 1 1916

Cost per foot, 11¢ Contractor, Boone Drilling Co. Address, Spencer, W. Va.

Drillers' Names J. N. Hayes & A. M. Shurlock

CONDUCTOR AND CASING USED IN DRILLING

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7½ Inch	6½ Inch	6¼ Inch	5½ Inch	5 3-16-Inch	4½ Inch
16						1795'				

CONDUCTOR AND CASING LEFT IN WELL

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7½ Inch	6½ Inch	6¼ Inch	5½ Inch	5 3-16 Inch	4½ Inch
16						1795'				

OIL WELL — GAS WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods		Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure
3/2/16	80 qts.									

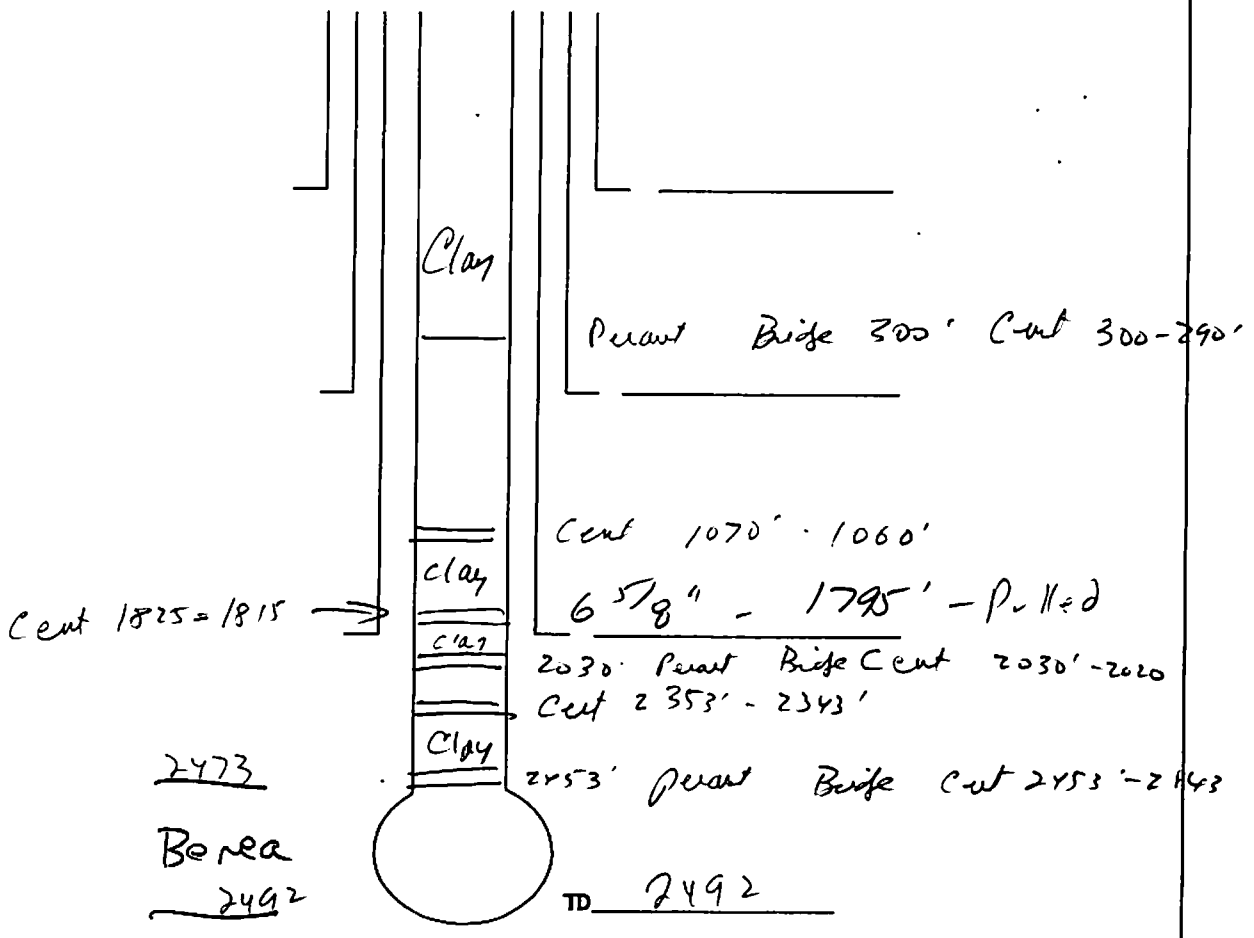
FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Soil		16	16	El = 977 ±
Slate	16	100	84	
Red Rock	100	140	40	
Slate	140	170	30	Reduced hole from 10" to
Sand	170	200	30	8" at 445'
Slate	200	220	20	
Sand	220	270	50	Hole full. Increased at 1130
Slate	270	310	40	
Sand	310	485	145	
Slate	485	495	40	
Sand	495	595	100	
Slate	595	635	40	
Sand	635	810	175	
Slate	810	900	90	
Sand	900	1010	110	
Slate	1010	1090	80	
Salt Sand	1090	1729	639	
Slate	1729	1734	5	
Maxton Sand	1734	1749	15	
Black Lime	1749	1779	30	
Pencil Cave	1779	1790	11	
Big Lime	1790	1970	180	
Injun Sand	1970	2030	60	
Slate	2030	2090	60	
Shells & Slate	2090	2250	160	
Slate	2250	2453	203	
Berea Slate	2453	2473	20	
Berea Grit	2473	2492	19	

47-043-30665

B F Curves 12

Griffithsville Unit #2 Field

47-043- 30665



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

74

AOR - Well Review Checklist

API Number: 47- 043 - 30669 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 13
Farm Name: BF Cunys
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2470
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 416,638 Northing: 4,234,038
Elevation: 293
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043 - 30669

FORM OG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

LEASE OR PROPERTY OWNER

ADDRESS

United Fuel Gas Company
NAME OF WELL OPERATOR
Charleston, W. Va.
COMPLETE ADDRESS
May 20 1949
WELL AND LOCATION
Duval District
Lincoln County
Well No. 13
B. F. Curnes Farm

STATE INSPECTOR SUPERVISING PLUGGING D. E. Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

Clyde Satterfield and E. J. Elkins, Jr.
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 R. H. Adkins, well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 12 day of May, 1949, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD	FILLING MATERIAL			PLUGS USED	CASING	
FORMATION	CONTENT	FROM	TO	SIZE & KIND	CSG PULLED	CSG LEFT IN
Set a Permanent Bridge at 2429' - 20' above Berea Sand. 2 sacks neat cement and 5' crushed stone on bridge. Filled with clay to 2329'. Neat Cement 2329' - 2319'.						
Set a permanend Bridge at 2050' - 30' below Big Injun. 2 sacks neat cement and 5' crushed stone on bridge. Filled with clay to 1840' - 30' below 5-3/16" casing. Neat Cement 1840' - 1830'. 5' crushed stone on cement Plug.						
PULLED 5-3/16" CASING						
PULLED 6-5/8" CASING AS BALANCE OF HOLE WAS FILLED AND PLUGGED.						
Continued filling with clay to 1070' - 20' above Salt Sand. Neat Cement 1070' - 1060'.						
SET A PERMANENT BRIDGE AT 300', 2 sacks neat cement and 5' crushed stone on bridge Filled with clay to surface. Erected marker such as is described in Rule 18, 1931 Regulations						

COAL SEAMS
(NAME)
(NAME)
(NAME)
(NAME)

DESCRIPTION OF MONUMENT
U. F. GAS CO.
B. F. CURNES # 13
DATE OF ABANDONMENT

and that the work of plugging and filling said well was completed on the 19 day of May, 1949.

And further deponents saith not.

R. H. Adkins Jr.
Clyde Satterfield

Sworn to and subscribed before me this 19 day of May, 1949.

J. S. Evans
Notary Public.

My commission expires:
April 4, 1952

Permit No. LIN-669

(123)

RD of Well No. 13 on U.S. Gauge Farm Acres Gilkie

Field, Bruce District County

Commenced 19 , Completed 19

Drilling Commenced June 9 1916 Completed July 18 1916

Cost per foot, 1.15 Contractor, Boone Drilling Co Address,

Drillers' Names Jas. Hanes & L. P. Davis

CONDUCTOR AND CASING USED IN DRILLING

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅝ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 3-16-Inch	4¼ Inch
16				465		1770				

CONDUCTOR AND CASING LEFT IN WELL

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅝ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 3-16 Inch	4¼ Inch
16						1770				

OIL WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods
7/20/16	80qts			

GAS WELL

Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure

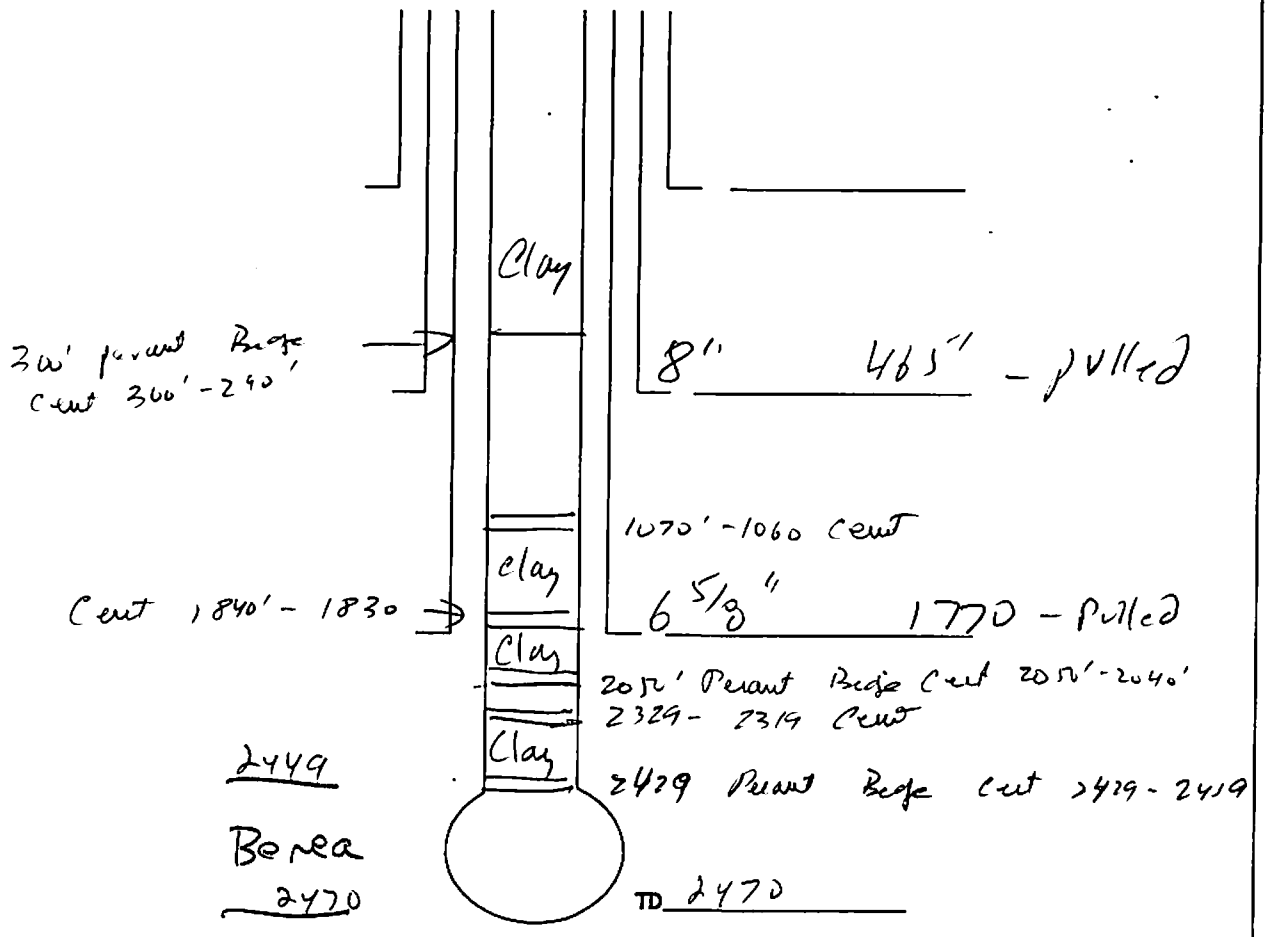
FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Soil		16	16	El= 9[illegible]
Red Rock	16	75	59	
Sand	75	125	50	
Slate	125	140	15	
Sand	140	165	25	
Slate	165	215	50	
Sand	215	315	100	
Slate	315	390	75	
Sand	390	460	70	
Slate	460	560	100	
Sand	560	585	25	
Slate	585	600	15	
Sand	600	725	125	Hole full Salt water at 1160'
Slate	725	785	60	
Sand	785	835	50	
Slate	835	860	25	
Sand	860	925	65	
Slate	925	965	40	
Sand	965	1045	80	
Lime Shells	1045	1090	45	
Salt Sand	1090	1690	600	
Weir Sand	1690	1730	40	
Black Lime	1730	1760	30	
Pencil Cave	1760	1765	5	
Big Lime	1765	1955	190	
Injun Sand	1955	2020	65	
Slate	2020	2060	40	
Shells	2060	2195	135	
Slate & Shells	2195	2429	234	
Brown Shale	2429	2449	20	
Berea Grit	2449	2470	21	

47-043-30669

B E Cunes 13

Griffithsville Unit #2 Field

47-043- 30669



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

(75)

AOR - Well Review Checklist

API Number: 47- 043 - 31268 Area Permit Number: 2R AP

Operator Name: H 6 Energy

Operator's Well #: 1

Farm Name: J W Gurnes

Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐

Well Status: Active ☐ Abandoned ☐ Plugged ☒

TD of well: 2621

Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐

Easting: 417,018 Northing: 4,234,631

Elevation: 337

Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐	
Date of Last MIT:	Passed?	No ☐	Yes ☐	
Open Hole Completion		No ☐	Yes ☒	
Well penetrates injection zone?		No ☐	Yes ☒	
Well perforated in injection zone?		No ☒	Yes ☐	
Cemented across injection zone?		No ☒	Yes ☐	
Packer immediately above injection zone (<100')?		No ☐	Yes ☐	No Packer ☐
		If No: Provide Depth:		
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒	

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**

Bottom Hole Injection Pressure **0**

Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:

Date Reviewed:

** Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-3128

Record of Well No. 1 on [illegible] Farm Acres [illegible]

[illegible] Field. Laurel District Lincoln County. [illegible]

Rig Commenced ... 19 . Completed ... 19

Drilling Commenced Feb 15th 1907. Completed May 21st 1907

Cost per foot. 1.[illegible] Contractor. Hughes Bros. Address. Spencer, W. Va.

Drillers' Names. J. H. Adams, Jno. Shinn, A. Smith, J. Ford.

CONDUCTOR AND CASING USED IN DRILLING.

Conductor	13 inch	10 inch	8¼ inch	8 inch	7⅝ inch	6⅝ inch	6¼ inch	5⅝ inch	5 inch	4½ inch
10.X				334		1905				

CONDUCTOR AND CASING LEFT IN WELL.

Conductor	13 inch	10 inch	8¼ inch	8 inch	7⅝ inch	6⅝ inch	6¼ inch	5⅝ inch	5 inch	4½ inch
						1915				

OIL WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods
3/19	40	7/24/13	2½	1 1/4 1405

GAS WELL

Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Soil		8	8	
Red Rock & Shale	8	330	322	Gas in Salt Sand at
Shale	330	450	120	1300 ft. Estimate 50000
Coal	450	455	5	
Shale	455	520	65	Hole caved from at
Sand	520	580	60	Salt Sand. water 1310 ft.
Shale	580	680	100	
Sand	680	720	40	
Shale	720	800	80	Gas increase at 2045 ft.
Sand & Shale	800	820	20	Estimate 100000 cubic ft.
Sand	820	850	30	
Sand	850	890	40	White top of Sand.
Shale	890	940	50	
Sand	940	1120	180	Gas Increase
Shale	1120	1220	100	
Salt Sand	1220	1872	652	
Black Slate	1872	1902	30	
Coal Cave	1902	1910	8	
Gas Slate	1910	2090	180	
Sand Sand	2090	2150	60	
Shale & Shells	2150	2575	425	
Sand Shale	2575	2595	20	
Sand & Sand	2595	2617	22	
Bit Sand Sand	2617	2621	4	Total

47-043-3128

FORM OG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER — ADDRESS

COAL OPERATOR OR OWNER — ADDRESS

LEASE OR PROPERTY OWNER — ADDRESS

Pack & Jackson — NAME OF WELL OPERATOR
Hamlin, W. Va. — COMPLETE ADDRESS
November 10, 1959

WELL AND LOCATION

Duval — District
Lincoln — County
Well. No. 1
J. W. Curnes — Farm

STATE INSPECTOR SUPERVISING PLUGGING G. H. Samples - Charleston, W. Va. Ph. DI 3-6524

AFFIDAVIT

STATE OF WEST VIRGINIA, }
County of Lincoln } ss:

Jerry Stephens and Charles Phipps Roger Wallace 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 Pack & Jackson, well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 30 day of November, 1959, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD	FILLING MATERIAL	CASING AND TUBING	CASING	
FORMATION		SIZE & KIND	CSG PULLED	CSG LEFT IN
	Set permanent bridge at 2577'			
	Cement 2577' to 2567'			
	Crushed Stone 2567' to 2562'			
	Clay 2562' to 2500'	6-5/8" Casing	1850'	55'
	Parted 6-5/8" Casing at 1850' and set permanent bridge			
	Cement 1850' to 1840'			
	Crushed Stone 1840' to 1835'			
	Mud & Clay 1835' to 1200'	5-3/16" Casing	1175'	None
	Cement 1200' to 1190'			
	Crushed Stone 1190' to 1185'			
	Set permanent bridge at 500'			
	Cement 500' to 490'			
	Crushed Stone 490' to 485'			
	Mud & Clay 485' to 3'			
	Cement 3' to surface.			

COAL SEAMS	DESCRIPTION OF MONUMENT
(NAME)	Erected monument as prescribed by law. 30" above surface with inscription "Pack & Jackson - Well #1 abandoned December 15, 1959."
(NAME)	
(NAME)	
(NAME)	

and that the work of plugging and filling said well was completed on the 15 day of December, 1959

And further deponents saith not.

Charles Phipps
Jerry Stephens

Sworn to and subscribed before this 17 day of December, 1959

Notary Public.

My commission expires: 4-12-64

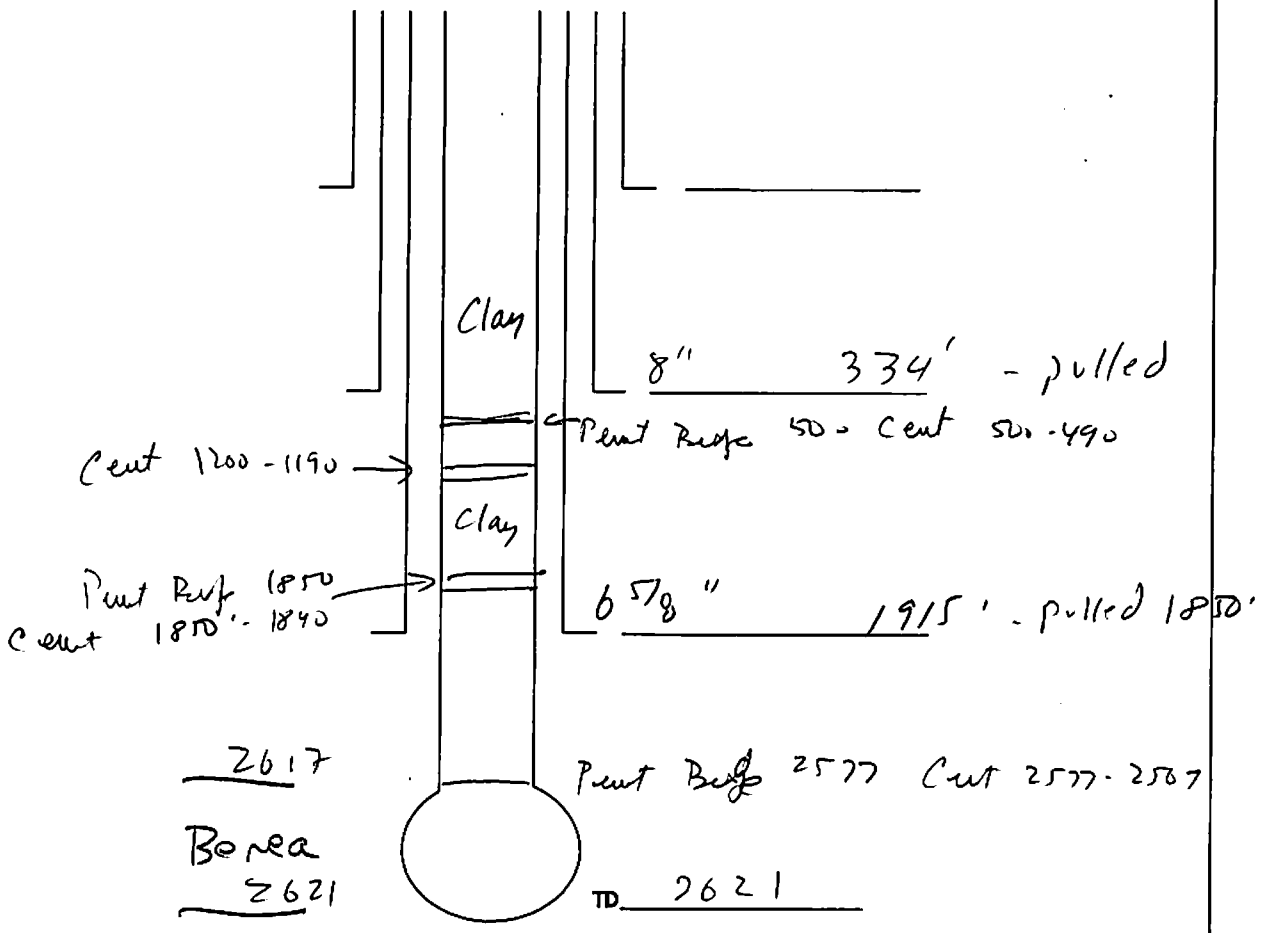
Permit No. LIN-1268

RECEIVED
DEC 1959
WEST VIRGINIA
DEPT. OF MINES

J W Cunnel

Griffithsville Unit #2 Field

47-043- 3126P



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

(76)

AOR - Well Review Checklist

API Number: 47- 043 - 30635 Area Permit Number: 2R AP

Operator Name: H 6 Energy

Operator's Well #: 2

Farm Name: J W Curnes

Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☐ Producer (NonWaterflood) ☑ Observation ☐ Other ☐

Well Status: Active ☐ Abandoned ☐ Plugged ☒

TD of well: 2428

Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐

Easting: 416,973 Northing: 4,234,829

Elevation: 291

Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = 0

Bottom Hole Injection Pressure 0

Hydrostatic Pressure 0

Comments:

Reviewer Name: Signature:

Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-30635

RECORD of Well No. 2 on J. W. Barnes Farm ... Acres 112 Feet

Field, ... District Lincoln ... County.

Rig Commenced ... 19 ... Completed ... 19

Drilling Commenced Sept. 3 1909. Completed Oct. 15 1909

Cost per foot. 10c Contractor, Wilson & Wilson Address, Spencer W.Va.

Drillers' Names, Bert Lemon Lot Yeager Mc Coy

CONDUCTOR AND CASING USED IN DRILLING.

Conductor	13 inch	10 inch	8¼ inch	8 inch	7¼ inch	6¼ inch	6¼ inch	6 5-16 inch	4¼ inch
16			203			1735			

CONDUCTOR AND CASING LEFT IN WELL.

Conductor	13 inch	10 inch	8¼ inch	8 inch	7¼ inch	6¼ inch	6¼ inch	6¼ inch	6 5-16 inch	4¼ inch
						1735				

OIL WELL — GAS WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods		Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure
1st		2nd	2½	2	1109					

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Big Lime	16	176	160	(J. W. Barnes well #2 Elev. 1735 - Doyle, Gordon)
Sand	176	290	114	
Sand & Slate	290	800	510	
Coal	800	805	5	
Top Salt Sand	1080	1690	610	Water, Hole full 1120
Slate	1690	1694	4	
Little Lime	1694	1720	26	
Pencil Cave	1720	1725	5	
Big Lime	1725	1905	180	Gas at 1840
Injun	1905	1985	80	
Sand & Slate	1985	2387	402	
Brown Shale	2387	2407	20	
Top Berea	2407	2426	19	Oil at 2407
Total		2428		

47-043-30635

FORM 00-9

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE. ONE COPY MAILED TO THIS DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

LEASE OR PROPERTY OWNER

ADDRESS

United Fuel Gas Company
NAME OF WELL OPERATOR
Charleston, W. Va.
COMPLETE ADDRESS
May 20, 19 49
WELL AND LOCATION
Duval District
Lincoln County
Well. No. 2
J. W. Curnes Farm

STATE INSPECTOR SUPERVISING PLUGGING D. E. Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

Kenzie Browning and E. J. Elkins, Jr.
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 R. H. Adkins well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 4 day of April, 1949, and that the well was plugged and filled in the following manner:

FORMATIONS	CASING AND TUBING PULLED	CASING AND TUBING LEFT IN	FILLING MATERIAL: CONTENT	FILLING MATERIAL: FROM	FILLING MATERIAL: TO	PLUGS USED: SIZE & KIND
			Set a Permanent Bridge at 2367' - 20' above Berea Sand. 2 sacks neat cement and 5' crushed stone on bridge. Filled with clay to 2300'. Neat Cement 2300' - 2295'.			
			Set a Permanent Bridge at 1785' - Bottom of Egg Injun. 2 sacks neat cement 5' crushed stone on bridge. Filled with clay to 1785' - 30' below 5-3/16" Casing. Neat Cement 1785' - 1775'. 5' crushed stone on cement Plug			
	5-3/16"		PULLED 5-3/16" CASING			
	6-5/8"		PULLED 6-5/8" CASING AS BALANCE OF HOLE WAS FILLED AND PLUGGED.			
			Continued filling with clay to 1060' - 20' above Salt Sands. Neat Cement 1060' - 1050'.			
			Set a permanent Bridge at 250'. 2 sacks neat cement 5' crushed stone on bridge Filled with clay to surface. Erected marker such as is described in Rule 18, 1931 Regulations			

COAL SEAMS
(NAME)
(NAME)
(NAME)
(NAME)

DESCRIPTION OF MONUMENT
U. F. GAS CO.
J. W. CURNES # 2
DATE OF ABANDONMENT

and that the work of plugging and filling said well was completed on the 21 day of April, 1949.

And further deponents saith not.

E. J. Elkins Jr.
Kenzie Browning

Sworn to and subscribed before me this 21 day of April, 19 49.

J. D. Adkins
Notary Public.

My commission expires:
April 4, 1951

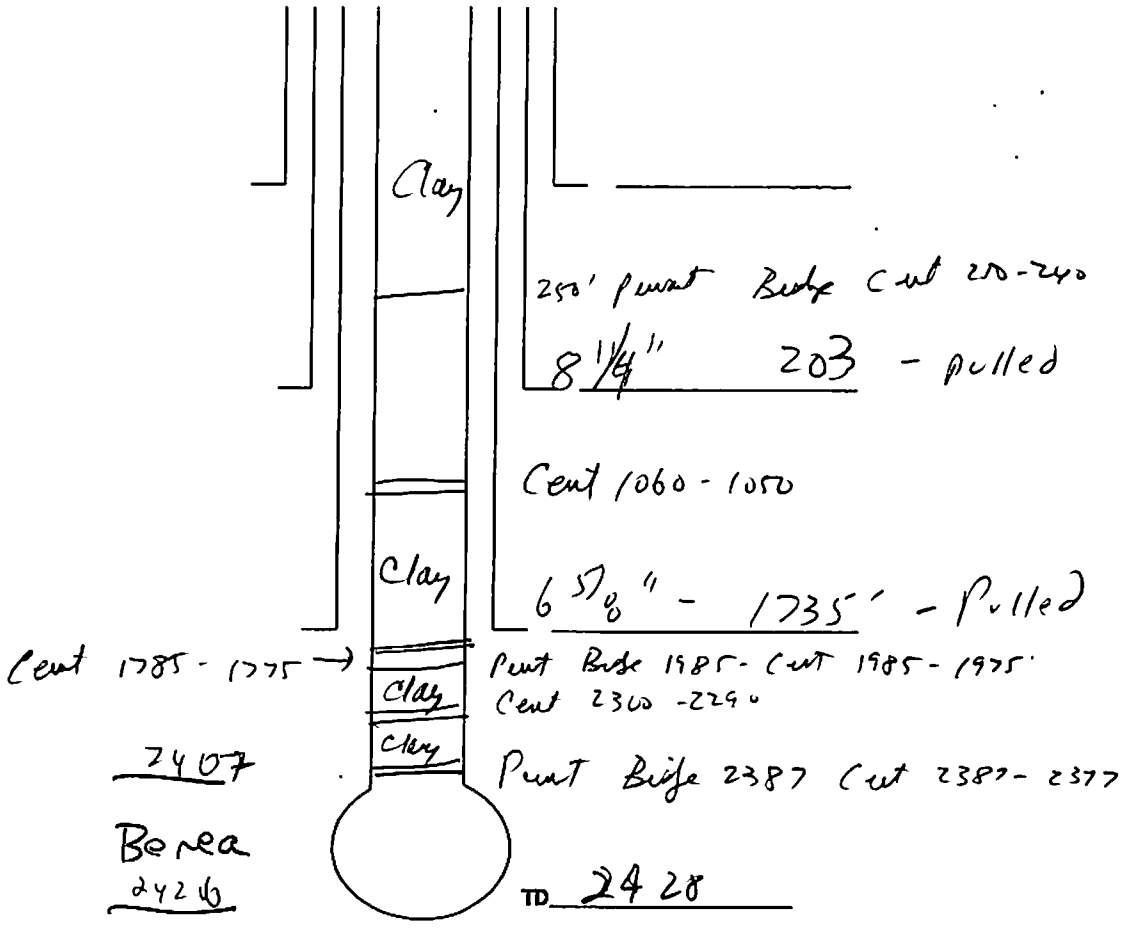
Permit No. LIN-635

(107)

J W Coals 2

Griffithsville Unit #2 Field

47-043- 30635



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

(77)

AOR - Well Review Checklist

API Number: 47- 043 - 02215 Area Permit Number: 2R AP

Operator Name: H 6 Energy

Operator's Well #: 3

Farm Name: JW Cones

Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐

Well Status: Active ☐ Abandoned ☐ Plugged ☒

TD of well: 2563

Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐

Easting: 416,902 Northing: 4,234,937

Elevation: 333

Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐	
Date of Last MIT:	Passed?	No ☐	Yes ☐	
Open Hole Completion		No ☐	Yes ☒	
Well penetrates injection zone?		No ☐	Yes ☒	
Well perforated in injection zone?		No ☒	Yes ☐	
Cemented across injection zone?		No ☒	Yes ☐	
Packer immediately above injection zone (<100')?		No ☐	Yes ☐	No Packer ☐
		If No: Provide Depth:		
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒	

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**

Bottom Hole Injection Pressure **0**

Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:

Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-02215

RECORD of Well No. 3 on J. H. Evans Farm Acres [illegible]

[illegible] Field, [illegible] District [illegible] County, [illegible]

Commenced [illegible] 19..., Completed [illegible] 19...

Drilling Commenced Feb 23 1910. Completed April 5 1910.

Cost per foot, 1[illegible] Contractor, Miller Bros Address, Jacksonville

Drillers' Names, [illegible]

CONDUCTOR AND CASING USED IN DRILLING.

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7¼ Inch	6¼ Inch	6¼ Inch	5¼ Inch	5 3/16 Inch	4¼ Inch
16				480		1750				

CONDUCTOR AND CASING LEFT IN WELL.

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7¼ Inch	6¼ Inch	6¼ Inch	5¼ Inch	5 3/16 Inch	4¼ Inch
16						1780				

OIL WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods
4th/10	Qts.	2nd	Shot Feb 13 1200 ft	

GAS WELL

Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Soil		10	10	
Blk Rock	10	225'	215'	Hole filled part of last
Lime Stone	225	260	35'	Sand water at 1240 ft
Slate	260	300	40	
Sand	300	370	70	Slight gas in Big Lime
Slate	370	430	60	at 2005'
Sand	430	515'	85'	
Slate	515'	580	65'	
Sand	580	660	80	
Slate	660	720	60	Fill out our tools 300 ft
Sand	720	790	70	coffee colored sand
Slate	790	830	80	60 ft
Sand	830	905	75'	
Slate	905'	950	45'	
Sand	950	1040	90	
Slate	1040	1100	60	
Sand	1100	1220	120	
Slate	1220	1245'	25'	
Salt Sand	1245'	1795'	550	
Slate	1795'	1830	35'	
Black Sand	1830	1870	40	
Coal Sand	1870	1875'	5'	
Big Lime	1875'	2055'	180	
Big Lime	2055'	2125'	70	
Berea Sand	2125'	2340	415'	
Berea Sand	2340	2363	23	

R-38

API # 47-043-02215

47-043-02215

COPY

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY
DIVISION 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: Curnes, J.W. Operator Well No.: No.3

LOCATION: Elevation: 1078.84' Quadrangle: Garretts Bend 7.5'
District: Duval County: Lincoln
Latitude: Deg. Min. Sec.
Longitude Deg. Min. Sec.

Well Type: OIL X GAS ____

Company: East Resources Inc.
P.O. BOx 5519
Vienna, WV 26105

Coal Operator or Owner ____

Agent: Michael McCown

Coal Operator or Owner ____

Inspector: Gary Scites
Permit Issued: 7/29/02

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Wood ss:

Terry Huffman and Bill Wade 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 East Resources Inc., well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 10th day of March, 2003, and that the well was plugged and filled in the following manner:

TYPE	FROM	TO	PIPE REMOVED	LEFT
Cement	2550'	2396'	5 1/2" 1869'	40'
Cement	2006'	1737'	7" 295'	1485'
Cement	1258'	1137'		
Cement	918'	770'	Shot 7" Casing Twice @ 1222',1216'	
Cement	680'	559'	822',615',504',295'	
Cement	400'	250'		
Cement	100'	0'		
6% Gel Between Cemnt Plugs				

Description of monument: 7" X 8'

and that the work of plugging and filling said well was completed on the 20th day of March, 2003.

And furthur deponents saith not.

Terry Huffman
Bill Wade

Sworn and subscribed before me this 7th day of May, 2003

OFFICIAL SEAL
NOTARY PUBLIC
STATE OF WEST VIRGINIA
S. DIANNE DULANEY
P.O. Box 5519
Vienna, West Virginia 26105
My Commission Expires Oct. 4, 2006

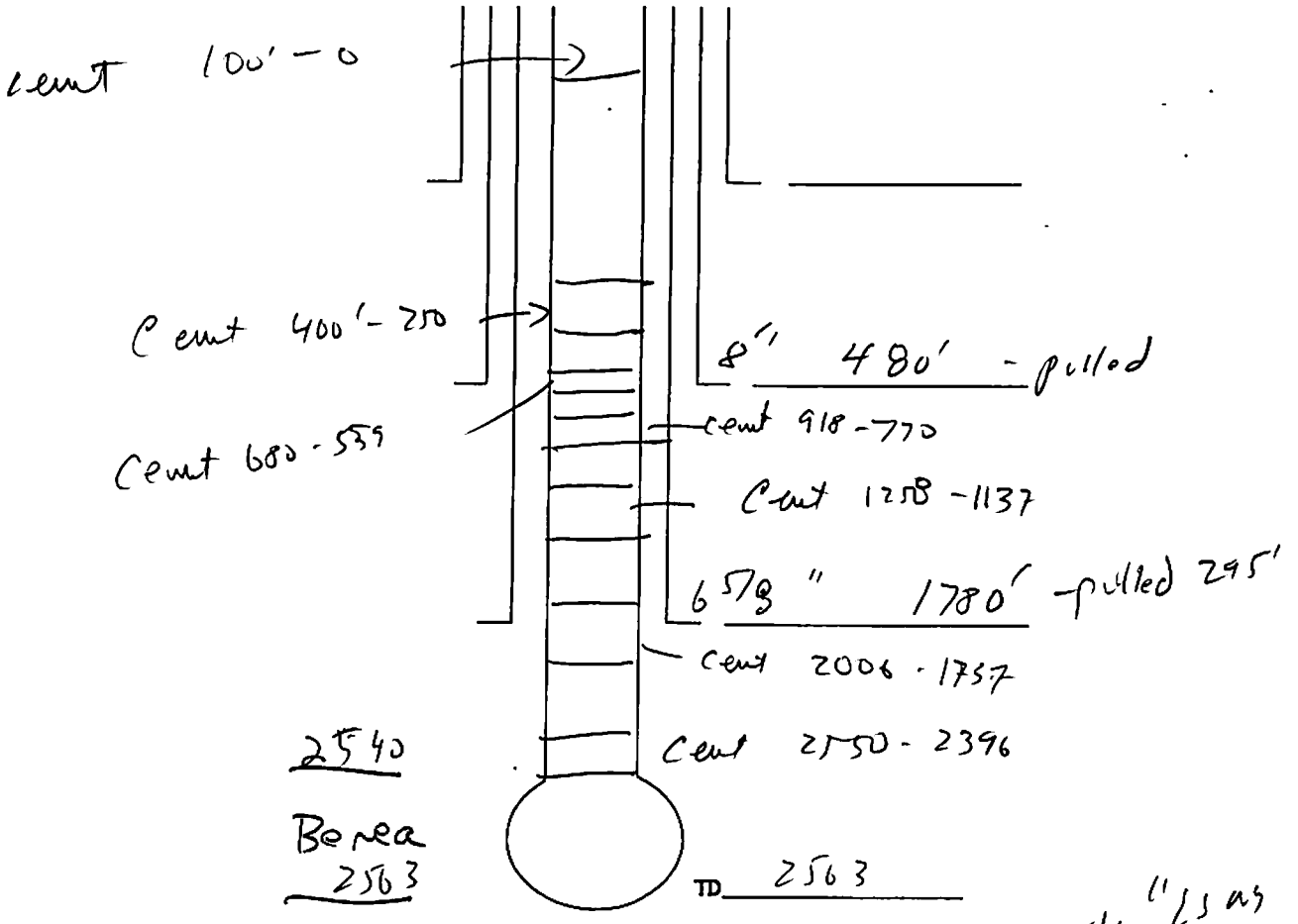
My Commission Expires Oct. 4, 2006

S. Dianne Dulaney
Notary Public

J W Cunnings

Griffithsville Unit #2 Field

47-043- 0 2215



From Drillers Records/Plugging Records

Pulled 1869' 5 1/2" casing
left 40'
Perfed 6 5/8" casing
unable to pull

WVDEP OOG Internal Use Only
Rev. 6/14/16

(78)

AOR - Well Review Checklist

API Number: 47- 043 - 30579 Area Permit Number: 2R AP

Operator Name: H 6 Energy

Operator's Well #: 4

Farm Name: JW Cumes

Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐

Well Status: Active ☐ Abandoned ☐ Plugged ☒

TD of well: 2644

Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐

Easting: 416,708 Northing: 4,234,921

Elevation: 347'

Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐	
Date of Last MIT:	Passed?	No ☐	Yes ☐	
Open Hole Completion		No ☐	Yes ☒	
Well penetrates injection zone?		No ☐	Yes ☒	
Well perforated in injection zone?		No ☒	Yes ☐	
Cemented across injection zone?		No ☒	Yes ☐	
Packer immediately above injection zone (<100')?		No ☐	Yes ☐	No Packer ☐
		If No: Provide Depth:		
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒	

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = 0

Bottom Hole Injection Pressure 0

Hydrostatic Pressure 0

Comments:

Reviewer Name: Signature:

Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-30579

RECORD of Well No. 4 on J. W. Cowper Farm Acres 50 ft

Field Lucas District Lincoln Co. County W. Va.

Rig Commenced ..... 19..... Completed ..... 19.....

Drilling Commenced June 31, 1910. Completed Nov 25 1910

Cost per foot 1 1/2 Contractor Keller Bros. Address Harding.

Drillers' Names E. L. Williamson & Wilbur Maxwell

CONDUCTOR AND CASING USED IN DRILLING.

Conductor	13 inch	10 inch	8¼ inch	6 inch	7⅝ inch	6⅝ inch	6¼ inch	5⅝ inch	5 3/16 inch	4¼ inch
14				310		1935				

CONDUCTOR AND CASING LEFT IN WELL.

Conductor	13 inch	10 inch	8¼ inch	6 inch	7⅝ inch	6⅝ inch	6¼ inch	5⅝ inch	5 3/16 inch	4¼ inch
						1935				

OIL WELL GAS WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods		Size of Packer	Depth Set	Tubing	1st Blacto Pressure	Rock Pressure
12/5/10		200	2 1/2	4/20/13	1500					

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Clay		14	14	at 410 to 414 - 4' Coal
Sand	14	50	36	
Red Rock	50	60	10	
Sand	60	120	60	Salt Sand, oil & gas
Slate & Rock	120	180	60	Showing through Sand
Slate	180	240	60	
Sand	240	280	40	Ex [illegible]
Sand & Rock	280	320	40	
Red Rock	320	360	40	
Slate	360	460	100	
Coal	460	610	150	
Sand	610	710	100	
Slate	710	770	60	
Sand	770	940	170	
Slate	940	1260	320	
Salt Sand	1260	1400	640	
Black Sand	1400	1430	30	
Pencil Cave	1430	1435	5	
Big Lime	1435	2120	185	
Keener	2120	2170	50	
Injun Slate	2170	2600	430	
Injun Sand	2600	2621	21	
Injun Sand	2621	2643	22	
Total Depth	2644			

47-043-30579

FORM OG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

LEASE OR PROPERTY OWNER

ADDRESS

NAME OF WELL OPERATOR: United Fuel Gas Company

COMPLETE ADDRESS: Charleston, W. Va.

March 1, 19 49

WELL AND LOCATION: Duval District, Lincoln County

Well No. 4

J. W. Curns Farm

STATE INSPECTOR SUPERVISING PLUGGING: D. E. Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

E. J. Elkins, Jr. and Kenzie Browning 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 R. H. Adkins, well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 1 day of February, 19 49, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD	FILLING MATERIAL			PLUGS USED	CASING	
FORMATION	CONTENT	FROM	TO	SIZE & KIND	CSG PULLED	CSG LEFT IN
Berea	Set Bridge 20' above Berea at 2601' with non-porous material. Set 10' Cement Plug on same, sealing off Berea Sand.					
Lime Injun	Set Bridge 30' below Big Injun Sand at 2200'. Filled hole through Big Injun and Big Lime with non-porous material to 30' below pipe. Set 10' Cement Plug on same at 1965' to 1955' sealing off Big Injun and Big Lime. Filled hole as pipe was removed.					
Salt Sand	Filled hole from 1955' with non-porous material to 20' above top of Salt Sand. Set 10' cement plug on same at 1240' to 1230' sealing off Salt Sand.					
	Opened hole to 200'; set bridge and 10' cement plug on same at 200' to 190'.					
	Filled hole with non-porous material to surface. Set Cement marker 12"x12"x30", marking date of abandonment.					
	5' crushed stone on top of all cement plugs.					

COAL SEAMS	DESCRIPTION OF MONUMENT
(NAME)	U.F.G. Co.
(NAME)	J. W. Curns #4
(NAME)	Date of Abandonment
(NAME)	

RECEIVED MAR 1949 WEST VIRGINIA DEPARTMENT OF MINES

and that the work of plugging and filling said well was completed on the 19th day of February, 19 49.

And further deponents saith not.

E. J. Elkins Jr.
Kenzie Browning

Sworn to and subscribed before me this 1st day of March, 19 49.

J. C. Chapman
Notary Public.

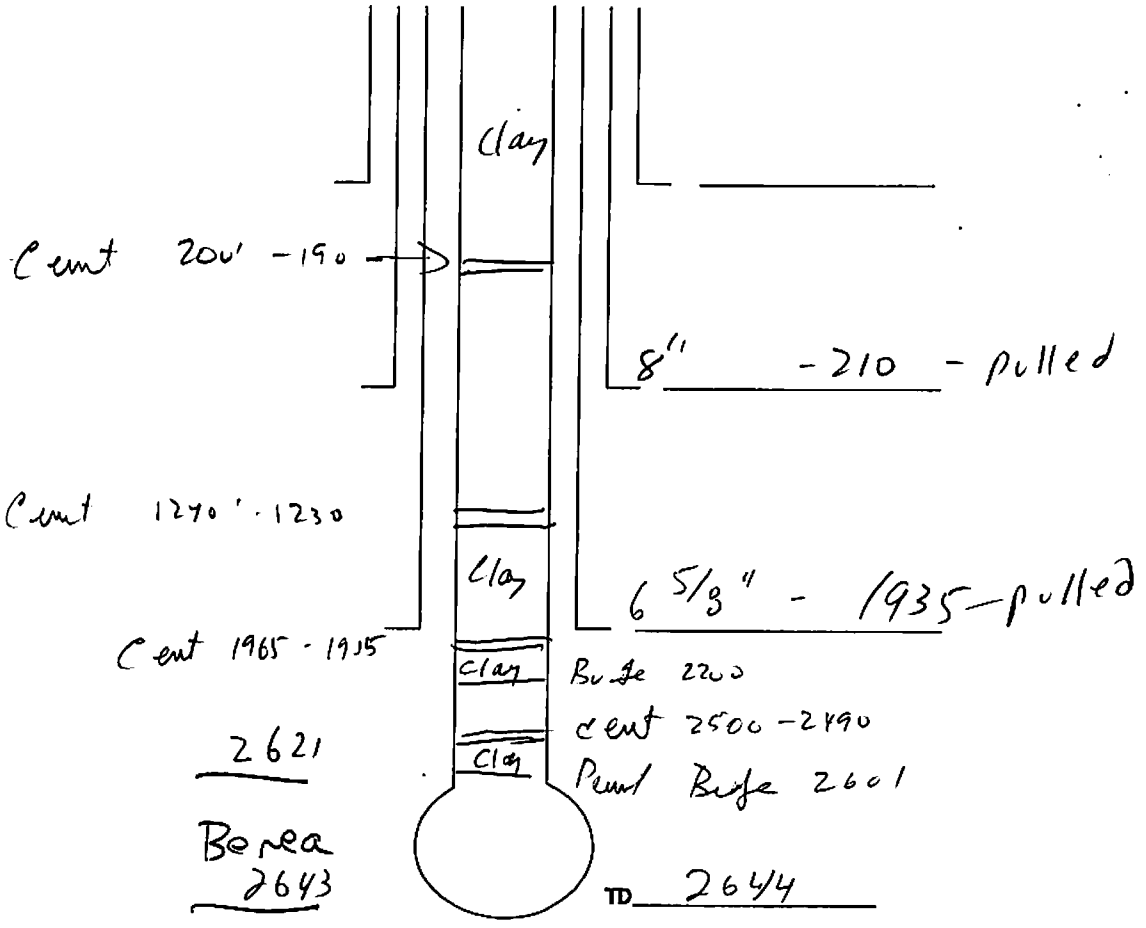
My commission expires:
April 1, 1957

Permit No. LIN-579

JW Cones 4

Griffithsville Unit #2 Field

47-043- 30579



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

79

AOR - Well Review Checklist

API Number: 47- 043 - 30219 Area Permit Number: 2R AP

Operator Name: H 6 Energy

Operator's Well #: 5

Farm Name: JU Cunn

Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐

Well Status: Active ☐ Abandoned ☐ Plugged ☒

TD of well: 2508

Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐

Easting: 416,344 Northing: 4,234,50.1

Elevation: 304'

Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐	
Date of Last MIT:	Passed?	No ☐	Yes ☐	
Open Hole Completion		No ☐	Yes ☒	
Well penetrates injection zone?		No ☐	Yes ☒	
Well perforated in injection zone?		No ☒	Yes ☐	
Cemented across injection zone?		No ☒	Yes ☐	
Packer immediately above injection zone (<100')?		No ☐	Yes ☐	No Packer ☐
		If No: Provide Depth:		
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒	

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**

Bottom Hole Injection Pressure **0**

Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:

Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-30219

Farm Acres

W. Va. State

of Well No. 5 on J. W. Barnes Farm Acres Griffiths

Field, Duvall District Lincoln County, W. Va.

Commenced 19 . Completed 19

drilling Commenced Aug 1 1911 . Completed Sept 12 1911

Cost per foot, 1/0 Contractor Wyler Bros Address Gawley W. Va.

Drillers' Names, Albert Bacuber & J. M. Schuchler

CONDUCTOR AND CASING USED IN DRILLING.

Conductor	13 inch	10 inch	8¼ inch	8 inch	7⅝ inch	6⅝ inch	6¼ inch	5¾ inch	5 5-16 inch	4¾ inch
10						1812				

CONDUCTOR AND CASING LEFT IN WELL.

Conductor	13 inch	10 inch	8¼ inch	8 inch	7⅝ inch	6⅝ inch	6¼ inch	5¾ inch	5 5-16 inch	4¾ inch
10						1812				

OIL WELL Pulled 1812

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods
9/14/11	90 qt.			

GAS WELL

Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Soil		10	10	290' 10" hole made
Sand	10	60	50	
Slate	60	100	40	Water 1210'
Red Rock	100	150	50	
Slate	150	240	90	6⅝ Casing 1812
Sand	240	275	35	
Slate	275	350	75	El = 1003.02
Sand	350	375	25	
Slate	375	420	45	
Sand	420	440	20	
Slate	440	460	20	Abandoned July 26-1940
Sand	460	580	120	
Coal	580	584	4	
Slate	584	660	76	
Sand	660	850	190	
Slate	850	900	50	
Sand	900	1000	100	
Slate	1000	1060	60	
Sand	1060	1100	40	
Slate	1100	1140	40	
Salt Sand	1140	1745	605	
Slate	1745	1755	10	
Black Lime	1755	1790	35	
Pencil Cave	1790	1795	5	
Little Lime	1795	1970	175	
Injun	1970	2020	50	
Berea Shale	2020	2466	446	
Brown Shale	2466	2486	20	
Berea	2486	2508	22	

47.043 - 30219

FORM OG-3

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

(NO COAL) — COAL OPERATOR OR OWNER
ADDRESS
COAL OPERATOR OR OWNER
ADDRESS
South Penn Natural Gas Co. — LEASE OR PROPERTY OWNED
Union Trust Bldg. Parkersburg, W. Va. — ADDRESS

SOUTH PENN NATURAL GAS COMPANY — NAME OF WELL OPERATOR
Union Trust Building Parkersburg, W. Va. — COMPLETE ADDRESS
February 25, 1941

WELL AND LOCATION
Duval — District
Lincoln — County
Well No. 5
J. W. Curnes — Farm
No.

STATE INSPECTOR SUPERVISING PLUGGING

AFFIDAVIT

STATE OF WEST VIRGINIA, }
County of Lincoln } ss:

E. L. Saul and Kelley Curnes 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 South Penn Natural Gas Co. well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 14th day of June, 1940, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD — FORMATION	FILLING MATERIAL — CONTENT	FROM	TO	PLUGS USED — SIZE & KIND	CASING — CSG PULLED	CSG LEFT IN
Berea Sand	Clay	2508	2466			
	Cement	2466	2456			
	Rock & Gravel	2456	2050			
Injun Sand	Red Clay	2050	1832	Wood Plug 6-5/8		
	Cement	1829	1819	1812-6-5/8		
Big Lime	Red Clay	1819	1775			
	Cement	1775	1765			
Salt Sand	Red Clay	1765	1120			
	Cement	1120	1110			
	Rock & Gravel	1110	to surface			

COAL SEAMS
(NAME) - - -
(NAME)
(NAME)
(NAME)

DESCRIPTION OF MONUMENT
6-1/4" Casing Extending 3' above ground, filled with cement, inscribed in Cement S.P.N.G.Co. J. W. Curnes # 5. Abd. 7-26-40.

and that the work of plugging and filling said well was completed on the 26th day of July, 1940

And further deponents saith not.

E. L. Saul
Kelley Curnes

Sworn to and subscribed before me this 6th day of March, 1941

J. H. Smith
Notary Public.

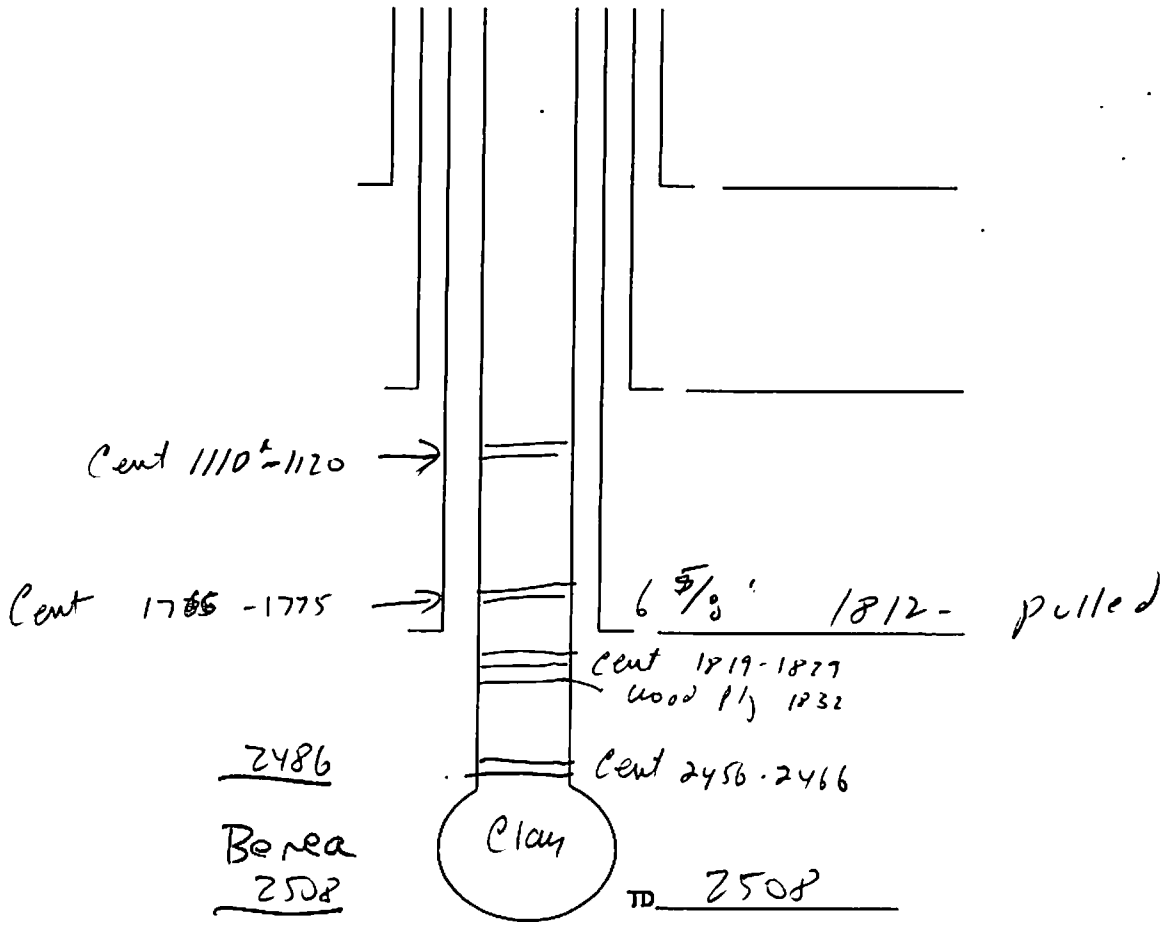
My commission expires: Dec 7-1947

PERMIT No. LIN-219

J W Curnes 5

Griffithsville Unit #2 Field

47-043- 3 0 219



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

80

AOR - Well Review Checklist

API Number: 47- 043 - 30384 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 6
Farm Name: J W Cunnes
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2660
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 416,815 Northing: 4,234,596
Elevation: 351
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐	
Date of Last MIT:	Passed?	No ☐	Yes ☐	
Open Hole Completion		No ☐	Yes ☒	
Well penetrates injection zone?		No ☐	Yes ☒	
Well perforated in injection zone?		No ☒	Yes ☐	
Cemented across injection zone?		No ☒	Yes ☐	
Packer immediately above injection zone (<100')?		No ☐	Yes ☐	No Packer ☐
		If No: Provide Depth:		
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒	

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-30384

RECORD of Well No. 6 on J. W. Owens Farm Acres

Field, District County

Rig Commenced 19 , Completed 19

Drilling Commenced Feb 9 1912, Completed Apr 3 1912

Cost per foot, 11⅓ Contractor, Yaughan Drilling Co Address, Gauley, W. Va.

Drillers' Names D. H. Rodgers & L. L. Lewis

CONDUCTOR AND CASING USED IN DRILLING

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅝ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 3-10-Inch	4⅜ Inch
10						1975'			2007	

CONDUCTOR AND CASING LEFT IN WELL

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅝ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 3-10 Inch	4⅜ Inch
10						1975' Pulled When Abandoning			2007 Pulled When Abandoned	

OIL WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods
4/9/12	80 qts			

GAS WELL

Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Soil & clay		10	10	Casing 10" in Big Lime
Limestone	10	15	5	
Red Rock	15	200	185	EI = 1152.91
Sand	200	215	15	
Red Rock	215	375	160	
Sand	375	460	85	
Slate	460	505	45	
Coal	505	508	3	
Limestone	508	520	12	570' of 10" hole
Slate	520	600	80	
Sand	600	670	70	
Slate	670	750	80	
Sand	750	950	200	
Slate	950	980	30	5 barrels of Water 1285'
Sand	980	1005	25	
Slate & Sand	1005	1275	270	
Salt Sand	1275	1927	652	Hole full of Water at 1360'
Little Lime	1927	1962	35	
Pencil Cave	1962	1965	3	
Big Lime	1965	2155	190	
Big Injun	2155	2195	40	
Slate & Shells	2195	2627	432	
Brown Shale	2627	2639	12	
Berea Sand	2639	2660	21	

"Abandoned"

47-043-30384

FORM OG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

(NO COAL) — COAL OPERATOR OR OWNER
ADDRESS
COAL OPERATOR OR OWNER
ADDRESS
South Penn Natural Gas Co. — LEASE OR PROPERTY OWNER
Union Trust Building, Parkersburg, W.Va.
ADDRESS

SOUTH PENN NATURAL GAS COMPANY, — NAME OF WELL OPERATOR
Union Trust Building, Parkersburg, W. Va.
COMPLETE ADDRESS
November 22 1943.

WELL AND LOCATION

Duval District
Lincoln County
Well No. 6
J. W. Curnes Farm

STATE INSPECTOR SUPERVISING PLUGGING Calvin Hall

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

Arlie Satterfield and Emery Mostler 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 South Penn Natural Gas Co., well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 1st. day of September, 1943, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD	FILLING MATERIAL			PLUGS USED	CASING	
FORMATION	CONTENT	FROM	TO	SIZE & KIND	CSG PULLED	CSG LEFT IN
Berea	Clay	2660	2619	5-3/16"	2007	
	Cement	2619	2609	6-5/8"	1937	38
Big Injun &	Clay	2609	2579			
Big Lime	Set bridge		2225			
	Clay	2225	2017			
	Cement	2017	2007			
Little Lime	Clay	2007	1907			
	Cement	1907	1897			
Salt Sand	Clay	1897	1255			
	Cement	1255	1245			
	Clay	1245	1215			
	Set Bridge		770			
	Clay	715	538			
	Clay	485	To Surface			
COAL SEAMS				DESCRIPTION OF MONUMENT		
(NAME)	Cement	770	715	6-5/8" Casing extending 3' above surface,		
(NAME)	Cement	538	485	set in Concrete and with the Inscription		
(NAME)				S.P.N.G.Co - J.W.Curnes #6 9-24-43		
(NAME)						

and that the work of plugging and filling said well was completed on the 24th. day of September, 1943.

And further deponents saith not.

Arlie Satterfield
Emery Mostler

Sworn to and subscribed before me this 9th day of December, 1943.

L. R. Simmons
Notary Public.

My commission expires: Dec. 7 - 1944

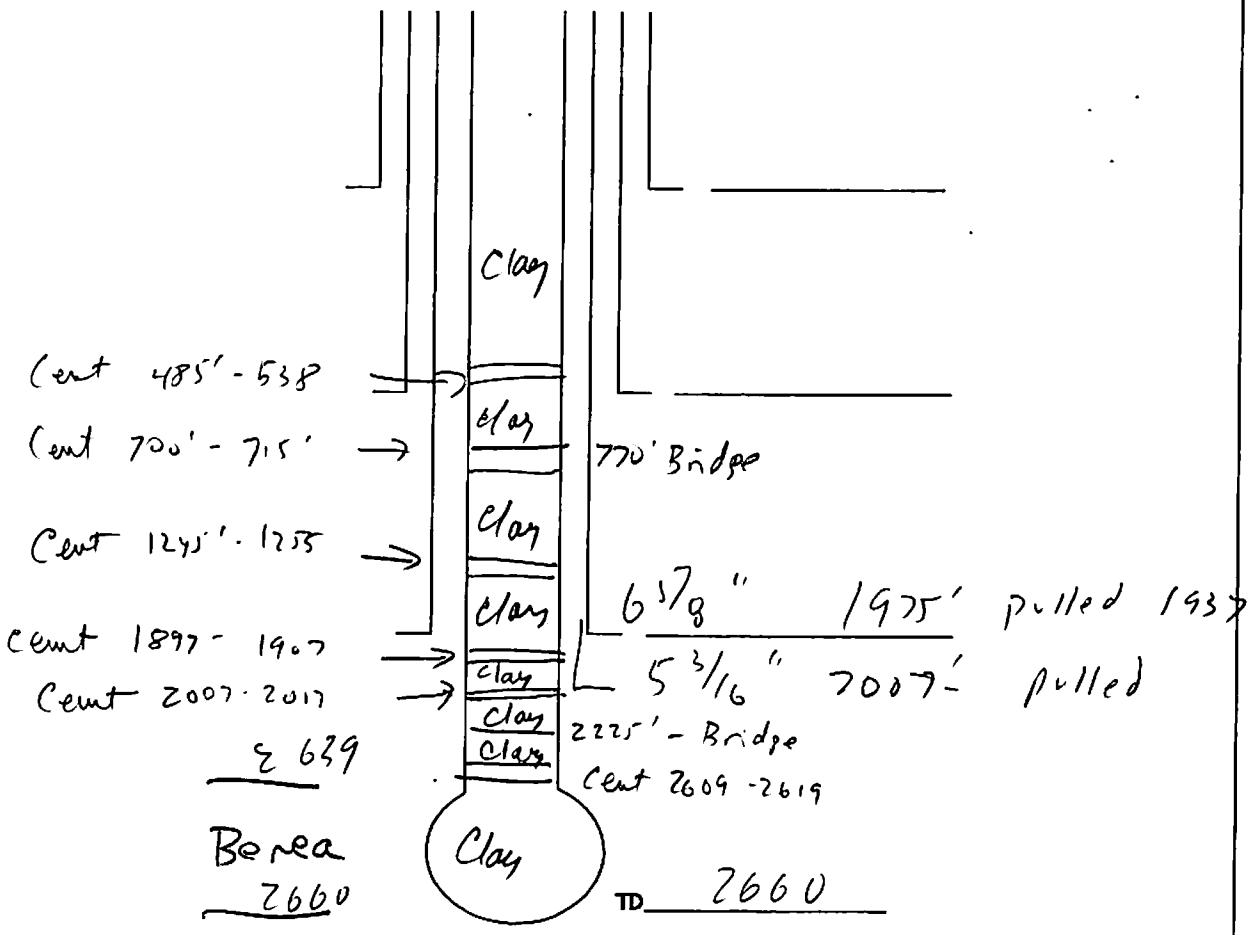
Permit No. LIN-384

ACCURATE PRINTING COMPANY, CLEVELAND, OHIO.

JW Carnes 6

Griffithsville Unit #2 Field

47-043- 30384



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

(81)

AOR - Well Review Checklist

API Number: 47- 043 - 30385 Area Permit Number: 2R AP

Operator Name: H 6 Energy

Operator's Well #: 7

Farm Name: JW Cain

Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐

Well Status: Active ☐ Abandoned ☐ Plugged ☒

TD of well: 2615

Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐

Easting: 416,569 Northing: 4,234,552

Elevation: 336

Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☒ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☐

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = 0

Bottom Hole Injection Pressure 0

Hydrostatic Pressure 0

Comments:

Reviewer Name: Signature:

Date Reviewed:

** Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-30385

RECORD of Well No. 7 on J. W. Williams Farm ____ Acres ____

Field. ____ District ____ County. ____

Rig Commenced ____ 19 ____ Completed ____ 19 ____

Drilling Commenced Oct 4 1911 Completed Nov 21 1911

Cost per foot. 12 Contractor, Walter Bros Address, Hewitt W Va

Drillers' Names, E. L. Williamson & Jay Nicolson

CONDUCTOR AND CASING USED IN DRILLING.

Conductor	13 inch	10 inch	8¼ inch	8 inch	7¼ inch	6¼ inch	6¼ inch	6¼ inch	6 5/16 inch	4¾ inch
16		28				1920			1327	

CONDUCTOR AND CASING LEFT IN WELL.

Conductor	13 inch	10 inch	8¼ inch	8 inch	7¼ inch	6¼ inch	6¼ inch	6¼ inch	6 5/16 inch	4¾ inch
16		28				1920 800-Pulled When Abandoning			1327-Pulled When Abandoning 1327	4¾ inch When Abdt

OIL WELL **GAS WELL**

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods		Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure
11/23/11	80 qts									

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Surface		12	12	
Red Rock	12	330	318	
Sand	330	350	20	
Slate & Shells	350	600	250	10" hole 330'
Sand	600	675	75	
Slate	675	725	50	
Sand	725	960	235	
Slate & Shells	960	1000	40	
Sand	1000	1040	40	
Slate	1040	1050	10	
Sand	1050	1100	50	
Black Slate	1100	1215	115	
Salt Sand	1215	1880	665	Hole filled with water
Black Lime	1880	1905	25	at 1270'
Pencil Cave	1905	1910	5	
White Lime	1910	2100	190	
Injun Sand	2100	2170	70	Puff Gas at 2135'
Berea Shale	2170	2575	405	
Brown Shale	2575	2595	20	
Berea Sand	2595	2615	20	Oil in top of sand to about 3' of Bottom Last 3' Sand.

"Abandoned"
Oct. 19, 1943.

47-043-30385

FORM OG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

(NO COAL) — COAL OPERATOR OR OWNER
ADDRESS
COAL OPERATOR OR OWNER
ADDRESS
South Penn Natural Gas Co. — LEASE OR PROPERTY OWNER
Union Trust Building, Parkersburg, W. Va. — ADDRESS

SOUTH PENN NATURAL GAS COMPANY, — NAME OF WELL OPERATOR
Union Trust Building, Parkersburg, W. Va. — COMPLETE ADDRESS
November 22 194 3 — WELL AND LOCATION
Duval District
Lincoln County
Well No. 7
J. W. Curnes Farm

STATE INSPECTOR SUPERVISING PLUGGING Calvin Hall

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

Arlie Satterfield and Emery Mostler 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 South Penn Natural Gas Co., well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 29th day of September, 1943, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD	FILLING MATERIAL			PLUGS USED	CASING	
FORMATION	CONTENT	FROM	TO	SIZE & KIND	CSG PULLED	CSG LEFT IN
Berea	Clay	2615	2575	6-5/8"	1800	1120
	Cement	2575	2565	5-3/16"	1327	
Big Injun &	Clay	2565	1930			
Big Lime	Cement	1930	1920			
Little Lime	Clay	1920	1860			
	Cement	1860	1850			
Salt Sand	Clay	1850	1195			
	Cement	1195	1185			
	Clay	1185	1800			
	Cement	800	790			
	Clay	790	726			
	Clay	671	499			
	Clay	446	To Surface			
COAL SEAMS				DESCRIPTION OF MONUMENT		
(NAME)	Cement	726	671	6-5/8" Casing extending 3' above		
(NAME)	Cement	499	446	surface, set in Concrete . Inscription		
(NAME)				S.P.N.G.Co. - J.W.Curnes #7 10-19-43		
(NAME)						

and that the work of plugging and filling said well was completed on the 19th day of October, 1943.

And further deponents saith not.

Arlie Satterfield
Emery Mostler

Sworn to and subscribed before me this 9th day of December, 1943.

E. R. Smith
Notary Public.

My commission expires: Dec. 7-1947

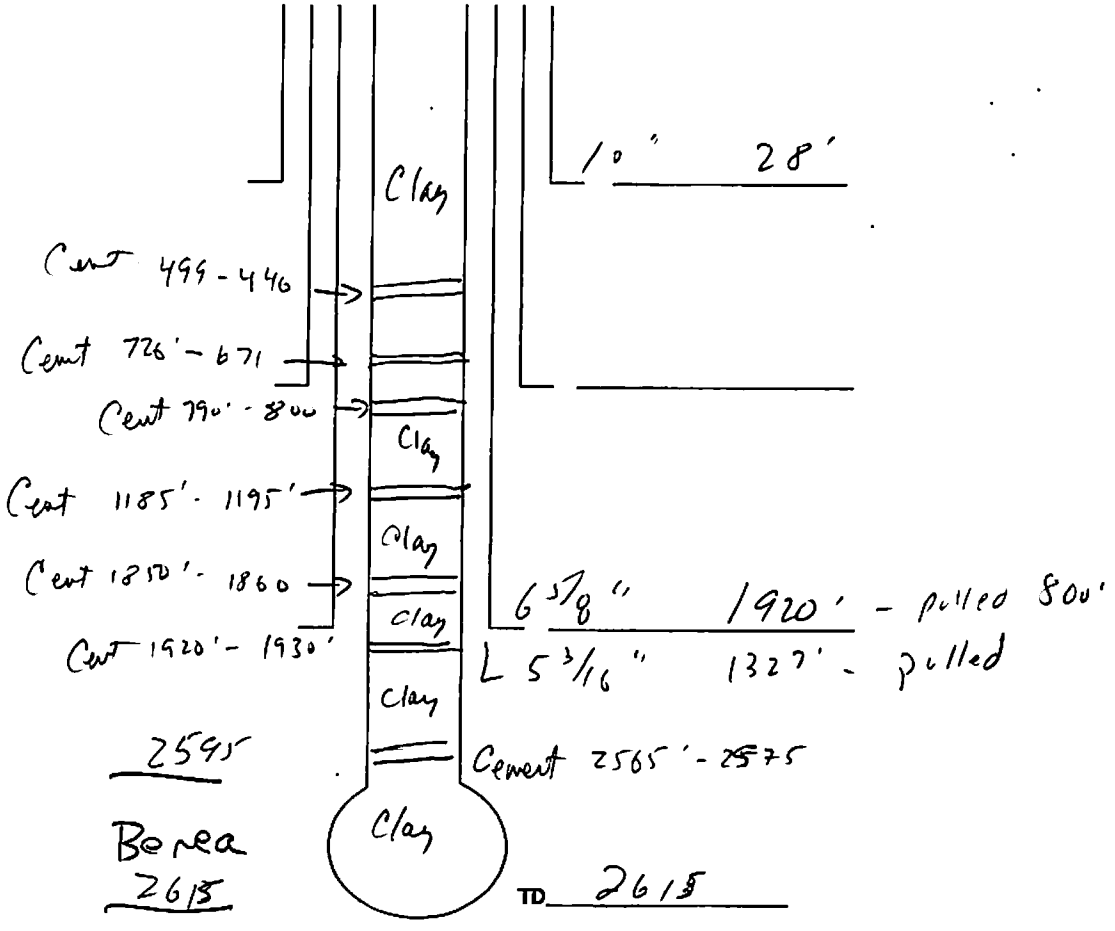
Permit No. LIN-385

SECURITY PRINTING COMPANY, CHARLESTON, W. VA.

J W Connor 7

Griffithsville Unit #2 Field

47-043- 30385



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

(82)

AOR - Well Review Checklist

API Number: 47- 043 - 30002 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 8
Farm Name: J W Cunes
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2536
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 416,602 Northing: 4,234,718
Elevation: 331
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47.043 - 30002

Well No. 8 J.W. Curnes Farm Acres
Lease No. Quad District Lincoln County W. Va. State
J.H. Jackson Contractor SOUTH PENN DRILLING TOOLS CO. Contractor
Drilling Commenced Jan. 26 1918 Drilling Completed Mar. 11, 1918
N. S. E. W.

ROCK FORMATION	TOP	BOTTOM	STEEL LINE MEASUREMENT	REMARKS
Conductor		16		
Red Rock	16	60	52	
Slate	60	285		
Sand	285	340		
Slate	340	385		
Coal	385	388		
Slate	388	450		
Sand	459	610	582	
Coal	610	615		
Slate	615	650		
Sand	650	700		
Slate	700	850		
Sand	850	920		
Slate	920	1030		
Sand	1030	1100		
Slate	1100	1150		
Salt Sand	1150	1782		
Water Hole full	1200			
Maxon Sand	1782	1802		
Little Lime	1802	1833		
Pencil Cave	1833	1841		
Big Lime	1841	2026	1854	

CASING RECORD AS TALLIED. NOT STEEL LINE MEASUREMENT

	PUT IN WELL		PULLED OUT		LEFT IN WELL	
SIZE	FEET	IN.	FEET	IN.	FEET	IN.

Shot Date
Amount
Sand
Result
Packer Size
Depth Set

Production First 24 Hours Bbls. Gas Test

Approved by Superintendent

47-043-30002

Well No. 8 J. W. Curnes Cont. Farm Acres
Lease No. District County State
Contractor Contractor
Drilling Commenced 191 Drilling Completed 191
N. S. E. W.

ROCK FORMATION	TOP	BOTTOM	STEEL LINE MEASUREMENT	REMARKS
Injun Sand	2026	2086		
Slate	2086	2186		
Shells	2186	2286		
Slate	2286	2496		
Brown Shale	2496	2516		
Berea Sand	2516	2536		
Oil	2520	2536		
Total Depth		2536	2536	

ABANDONED

JAN 28 1930

El = Derrick Floor 1037.9

CASING RECORD AS TALLIED. NOT STEEL LINE MEASUREMENT

SIZE	PUT IN WELL FEET	PUT IN WELL IN.	PULLED OUT FEET	PULLED OUT IN.	LEFT IN WELL FEET	LEFT IN WELL IN.
10	52	—	~~57~~ 52	—	~~57~~	—
8 1/4	585		~~585~~ 585	—	60	
6 5/8	1868	—			1868	—

Shot Date March 14, 1918.
Amount 80 qts.
Sand Berea
Result Open Flow.

Packer Size None Used
Steel Shoe Used
Depth Set 1854

Production First 24 Hours .... H .... Bbls. Gas Test.

Approved by ... A. H. Anschutz ....Superintendent

47-043-30002

Form O-8

AFFIDAVIT IN TRIPLICATE TO TIME AND MANNER OF PLUGGING AND FILLING WELL

(Required by Section 9, Chapter 86, Acts 1929)

WEST VIRGINIA DEPARTMENT OF MINES

OIL AND GAS SECTION

South Penn Oil Company owns coal
COAL OPERATOR

ADDRESS

COAL OPERATOR

ADDRESS

COAL OPERATOR

ADDRESS

South Penn Oil Company
NAME OF WELL OPERATOR

P. O. Drawer 1255, Pittsburgh, Pa.
COMPLETE ADDRESS

April 15th, 1930

WELL AND LOCATION

Duval District

Lincoln County

Well No. 8

J. W. Curnes Farm

AFFIDAVIT TO BE MADE IN TRIPLICATE, ONE COPY TO BE MAILED BY REGISTERED MAIL TO THE DEPARTMENT, ONE COPY TO BE RETAINED BY THE WELL OPERATOR AND THE THIRD COPY (AND EXTRA COPIES IF REQUIRED) TO BE MAILED TO EACH COAL OPERATOR ABOVE NAMED AT THEIR RESPECTIVE ADDRESSES.

AFFIDAVIT

STATE OF WEST VIRGINIA,
COUNTY OF Lincoln } ss:

A. H. Anshutz and

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 South Penn Oil Company, well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 11th day of January 19 30, and that the well was plugged and filled in the following manner:

Manner in which sand was plugged: Filled hole from 2536 to 1900' with non porous Red Clay and fire Clay, cemented 1900-1889 (11 ft.). Could not pull 6-5/8" Casing. Tried to cut 6 5/8" Casing at 1240', but could not. Left 6-5/8" Casing in well to protect coal, which was cemented in. This well was in a very bad slip, causing abandoning.

Manner in which coal was plugged:

Description of monument: 8¼" Casing left in well, 3 ft. above surface, bridged 4" from top filled with cement with 2" pipe extending 6" above top of pipe, open with 2" Ell and nipple on top. Filled top of casing with Babbit, and inscribed "South Penn Oil Co. J. W. Curnes #8 Abd. Feb. 28, 1930".

(THE ABOVE DESCRIPTIONS MUST BE IN DETAIL AND IN ACCORDANCE WITH THE PROVISIONS OF SECTION 10, OIL AND GAS ACT OF 1929.)

and that the work of plugging and filling said well was completed on the 28th day of February, 19 30

And further deponents saith not.

A. H. Anshutz

Sworn to and subscribed before me this 23rd day of April, 19 30

APR 23 1930 WEST VIRGINIA

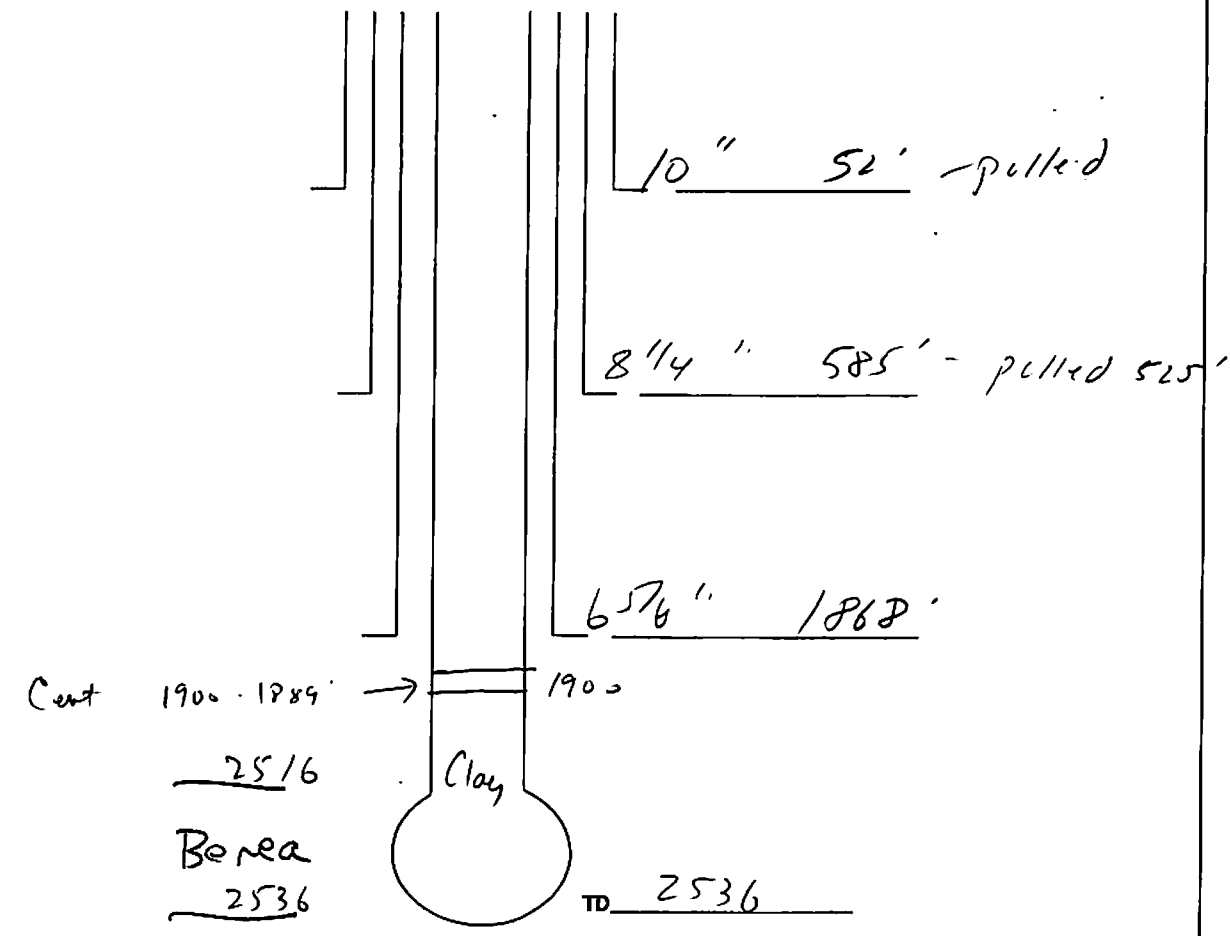
E. L. Shepard
Notary Public.

My Commission expires:
Jan 2 - 1932

JW Corner B

Griffithsville Unit #2 Field

47-043- 3000 2



From Drillers Records/Plugging Records

Unable to pull 6 5/8" casing

WVDEP OOG Internal Use Only
Rev. 6/14/16

(83)

AOR - Well Review Checklist

API Number: 47- 043 - 31054 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 1
Farm Name: Maggie Fouke
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2527
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 417,362 Northing: 4,231,986
Elevation: 310'
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐	
Date of Last MIT:	Passed?	No ☐	Yes ☐	
Open Hole Completion		No ☐	Yes ☒	
Well penetrates injection zone?		No ☐	Yes ☒	
Well perforated in injection zone?		No ☒	Yes ☐	
Cemented across injection zone?		No ☒	Yes ☐	
Packer immediately above injection zone (<100')?		No ☐	Yes ☐	No Packer ☐
		If No: Provide Depth:		
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒	

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = 0
Bottom Hole Injection Pressure 0
Hydrostatic Pressure 0

Comments:

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

OG-10

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

47-043-31054

WELL RECORD

Oil or Gas Well _____ (KIND)

Permit No. _____

Company G. S. & F. Supply Company
Address Griffithsville, W. Va.
Farm Maggie Fowler Acres 45
Location (waters) Bear Fork
Well No. 1 Elev. 1034.85
District Duval County Lincoln
The surface of tract is owned in fee by
Address
Mineral rights are owned by
Address
Drilling commenced
Drilling completed
Date Shot From To
With
Open Flow /10ths Water in Inch
/10ths Merc. in Inch
Volume Cu. Ft.
Rock Pressure lbs. hrs.
Oil bbls., 1st 24 hrs.
Fresh water feet feet
Salt water feet feet

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size 16			Kind of Packer
13			
10			Size of
8¼			
6¾	1825	1825	Depth set
5 3/16	1882	1882	
3			Perf. top
2	2519	2519	Perf. bottom
Liners Used			Perf. top
			Perf. bottom

CASING CEMENTED SIZE No. Ft. Date

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

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks
Salt Sand			1000	1760			
Little Lime			1775	1815			
Pencil Cave			1815	1818			
Big Lime			1818	2000			
Big Injun			2000	2080			
Brown Shale			2487	2505			
Berea Sand			2505	2527			
Total Depth				2527			

AUG 1951
WEST VIRGINIA
DEPARTMENT OF MINES

47-043-31054

FORM OG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER — ADDRESS

COAL OPERATOR OR OWNER — ADDRESS

LEASE OR PROPERTY OWNER — ADDRESS

NAME OF WELL OPERATOR: G. S. H. Supply Co.
COMPLETE ADDRESS: c/o Ed Rodgers Griffithsville, W. Va.

WELL AND LOCATION

Dec. 2, 1951 — 19
District: Duval
County: Lincoln
Well No. 1
Farm: Maggie Fowler Farm

STATE INSPECTOR SUPERVISING PLUGGING: Jane E. Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA, County of Lincoln } ss:

and _____ 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 G. S. H. Supply Co. well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 10 day of Oct., 19 51, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD — FORMATION	FILLING MATERIAL — CONTENT	FROM	TO	PLUGS USED — SIZE & KIND	CASING — CSG PULLED	CSG LEFT IN
	Set bridge	2480'		7	1777	None
	neat cement	2480'	2470'			
	crushed stone	5'		5	1884	—
	clay	2465'	1855			
	neat cement	1855'	1845'			
	crushed stone	5'				
	Ledge set	1200'				
	neat cement	1200'	1190'			
	crushed stone	5'				
	clay	1185'	1070'			
	cement	1070'	1060'			
	set bridge	350'				
	neat cement	350'	340'			
	crushed stone	5'				
	Filled with clay to surface					

COAL SEAMS: (NAME) (NAME) (NAME) (NAME)

DESCRIPTION OF MONUMENT: Erected marker according to rule 16, 1951 regulations

RECEIVED JAN 1952 WEST VIRGINIA DEPARTMENT OF MINES

and that the work of plugging and filling said well was completed on the 16 day of Oct., 19 51.

And further deponents saith not.

J. C. McCallister
J. R. Thornton

Sworn to and subscribed before me this 9 day of Jan., 1952.

J. R. Osborne
Notary Public.

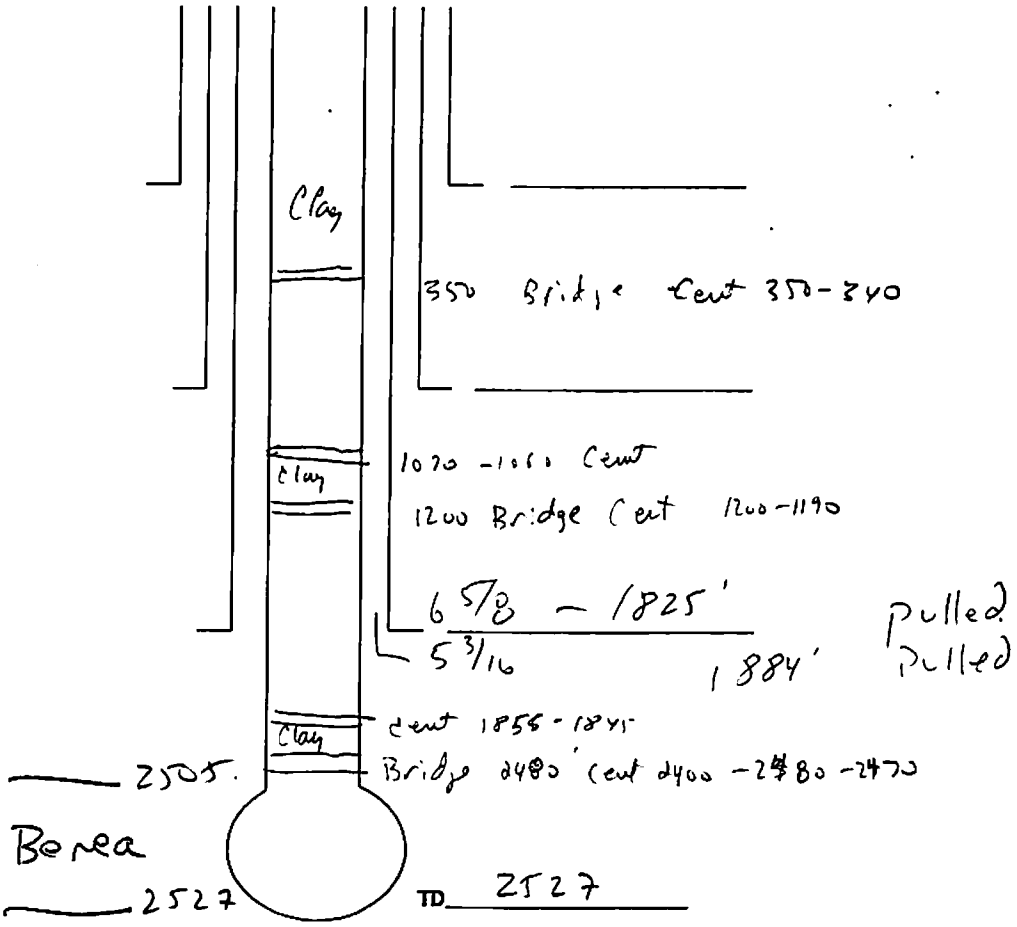
My commission expires: Oct. 9, 1957

Permit No. Lin-1054

Mossie Fowler 1

Griffithsville Unit #2 Field

47-043- 31054



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

(84)

AOR - Well Review Checklist

API Number: 47- 043 - 31053 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 2
Farm Name: Maggie Fowler
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2498
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: Northing:
Elevation:
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = 0

Bottom Hole Injection Pressure 0

Hydrostatic Pressure 0

Comments:

Reviewer Name: Signature:

Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-31053

RECORD of Well No. 2 on Wagner Fowler Farm Acres

Field, District County

Rig Commenced 19 , Completed 19

Drilling Commenced May 7 1912, Completed June 22 1912

Cost per foot, 1¢ Contractor, Hawley & Freeman Drlg Co Address, Hawley W Va

Drillers' Names P J King & N. Coldsmith

CONDUCTOR AND CASING USED IN DRILLING

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅝ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 3-16-Inch	4⅞ In
		14			1	1800				

CONDUCTOR AND CASING LEFT IN WELL

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅝ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 3-16 Inch	4⅞ In
						1800				

OIL WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods
6/24/12	80 qts			

GAS WELL

Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pre

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Surface Clay	14			Reduced hole at 425'
Sand	14	20	6	
Slate	20	50	30	Hole full of water in
Slate & sand	50	235	185	salt sand 1165'
Coal	235	239	4	
Slate & sand	239	420	181	Gas in salt sand
Coal	420	425	5	at 1120'
Slate & sand	425	1095	670	
Salt & sand	1095	1745	650	
Slate	1745	1755	10	
Little Lime	1755	1785	30	
Pencil Cave	1785	1790	5	
Big Lime	1790	1970	180	
Keener sand	1970	2040	70	
Slate	2040	2120	80	
Shells	2120	2205	85	
Slate & Shells	2205	2455	250	
Shale	2455	2477½	22½	
Berea sand	2477½	2498½	21	

47-043-31053

FORM GG-6

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

LEASE OR PROPERTY OWNER

ADDRESS

G. S. H. Supply Co.
NAME OF WELL OPERATOR

Griffithsville W. Va.
COMPLETE ADDRESS

Dec. 3, 19 51
WELL AND LOCATION

Duval District

Lincoln County

Well No. #2

Myrtle Fowler Farm

STATE INSPECTOR SUPERVISING PLUGGING Don C. Lemon

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

and

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 G. S. H. Supply Co., well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 18 day of Oct., 19 51, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD	FILLING MATERIAL			PLUGS USED	CASING	
FORMATION	CONTENT	FROM	TO	SIZE & KIND	CSG PULLED	CSG LEFT IN
	set Bridge	2450'		7"	442	1338
	neat cement	2450'	2440'			
	crushed stone	5'		5"	1901	—
	Filled with clay	2435'	1630'			
	neat cement	1635'	1620'			
	Crushed stone	5'				
	Set bridge	1200'				
	neat cement	1200'	1190'			
	crushed stone	5'				
	filled with clay	1185'	1075'			
	neat cement	1075'	1065'			
	set bridge	400'				
	Neat cement	400'	390'			
	crushed stone	5'				
	Filled with clay to surface					
COAL SEAMS				DESCRIPTION OF MONUMENT		
(NAME)				Erected marker according to Rule 18, 1951 regulations		
(NAME)						
(NAME)						
(NAME)						

RECEIVED
JAN 1952
WEST VIRGINIA
DEPARTMENT OF MINES

and that the work of plugging and filling said well was completed on the 27 day of Oct., 19 51

And further deponents saith not.

J. C. McAllister
R. D. Thornton

Sworn to and subscribed before me this 9 day of January, 19 52.

J. R. Conners
Notary Public.

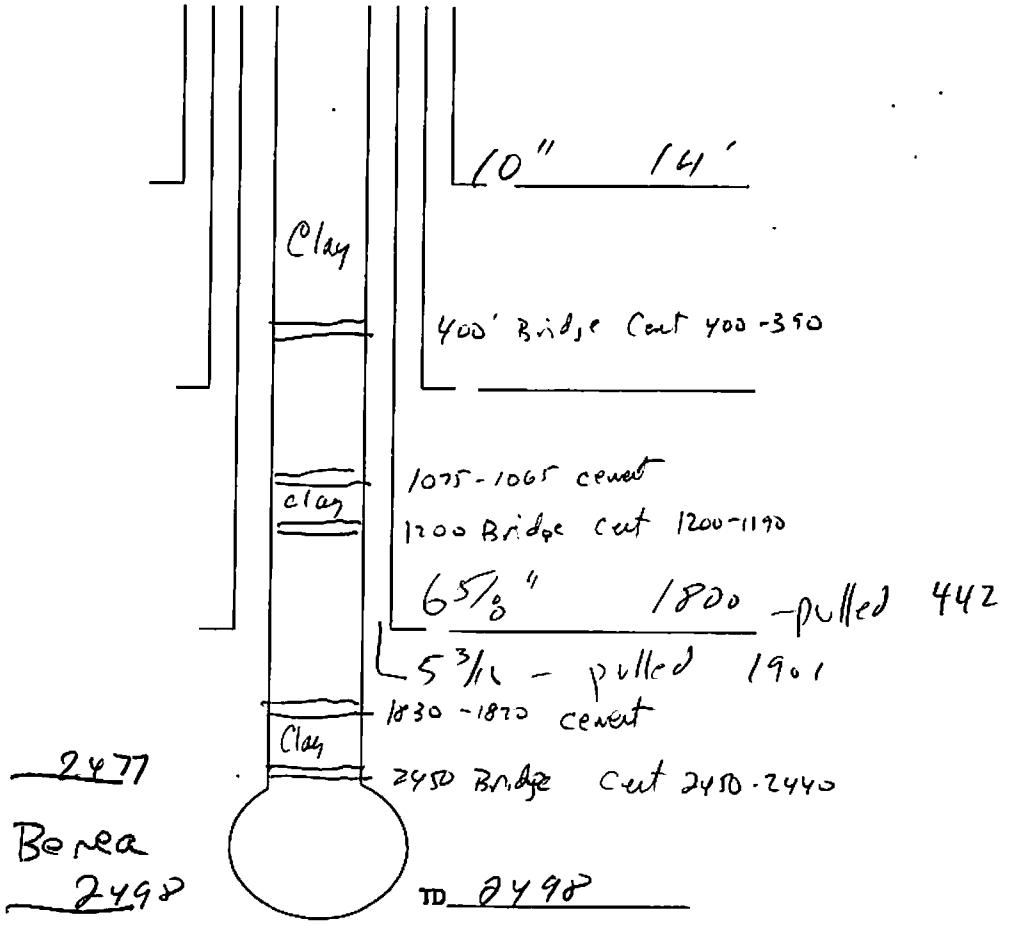
My commission expires:
Oct-9-1957

Permit No. Lin- 1053

Maggie Fowler 2

Griffithsville Unit #2 Field

47-043- 31053



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

85

AOR - Well Review Checklist

API Number: 47- 043 - 02233 Area Permit Number: 2R AP

Operator Name: H 6 Energy

Operator's Well #: 3

Farm Name: Massie Fowler

Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐

Well Status: Active ☐ Abandoned ☐ Plugged ☒

TD of well: 2603

Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐

Easting: 417,451 Northing: 4,231,769

Elevation: 338

Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐	
Date of Last MIT:	Passed?	No ☐	Yes ☐	
Open Hole Completion		No ☐	Yes ☒	
Well penetrates injection zone?		No ☐	Yes ☒	
Well perforated in injection zone?		No ☒	Yes ☐	
Cemented across injection zone?		No ☒	Yes ☐	
Packer immediately above injection zone (<100')?		No ☐	Yes ☐	No Packer ☐
		If No: Provide Depth:		
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒	

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**

Bottom Hole Injection Pressure **0**

Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:

Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-02233

RECORD of Well No. 3 Maggie Fowler Fa Acres

Field, District County

Rig Commenced 19..., Completed 19...

Drilling Commenced Aug 12 1912, Completed Mar 1 1913

Cost per foot, 1/5 Contractor, Hamilton & Fennimore Drlg Co. Address, Hamilton, W. Va.

Drillers' Names Ed. Stidhamyer & W. D. Rodgers

CONDUCTOR AND CASING USED IN DRILLING

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅝ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 3-16 Inch	4⅜ Inch
13						1910				

CONDUCTOR AND CASING LEFT IN WELL

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅝ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 3-16 Inch	4⅜ Inch
13						1910				

OIL WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods
11/2/12	80 qts.			

GAS WELL

Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Soil & Clay		13	13	El = 1112.61
Red Rock	13	80	67	
Sand	80	130	50	
Red Rock	130	150	20	
Sand	150	300	150	530' of 10" Hole
Slate	300	400	100	
Sand	400	530	130	
Coal	530	535	5	
Slate	535	560	25	
Sand	560	600	40	
Slate & Sand	600	800	200	
Slate & Sand	800	1200	400	
Slate Sand	1200	1865	665	Hole full of water at 1265'
Little Lime	1865	1900	35	
Pencil Cave	1900	1903	3	
Big Lime	1903	2088	185	
Big Injun	2088	2158	70	
Sheets	2158	2318	160	
Slate	2318	2564	246	
Squaw Shale	2564	2584	20	
Berea Sand	2584	2603	19	

WWR-38

API# 47-043-2233

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY
DIVISION 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: Maggie Fowler
LOCATION: Elevation: 1,124'
District: Duval
Latitude:
Longitude:

Operator Well No.: No. 3
Quadrangle: Griffithsville 7.5'
County: Lincoln
Deg. Min. Sec.
Deg. Min. Sec.

Well Type: Oil X Gas WIW

Company: East Resources Inc.
P.O. Box 5519
Vienna, WV 26105
Agent: Philip S. Ondrusek
Inspector: Ralph Triplett
Permit Issued: 7/23/2009'

Coal Operator or Owner: NA
Coal Operator or Owner: NA

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Wood ss:
Mark Miller and Paul Stevens 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 East Resources Inc., well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 17th day of August, 2010', and that the well was plugged and filled in the following manner:

TYPE	FROM	TO	PIPE REMOVED	LEFT
Cement	2560'	2460'	6 5/8" 0'	1910'
Cement	2068'	1850'	5 3/16" 1925'	0'
Cement	1210'	1100'		
Cement	650'	500'		
Cement	319'	200'		
Cement	110'	0'		
	Peforated 6 5/8" casing, 3 shots from 1152' - 1148', 602' - 598', 252' - 248' & 100' - 97'			
6% Gel Between Cement Plugs				

Description of monument: 5 1/2" x 5'
and that the work of plugging and filling said well was completed on the 27th day of August 2010'
And further deponents saith not.

Mark Miller
Roger McComas

Sworn and subscribe before me this 16 day of September 2010

My commission expires: Nov. 12, 2018

Tina L Pethtel
Notary Public

Affidavit reviewed by the Office of Oil and Gas:

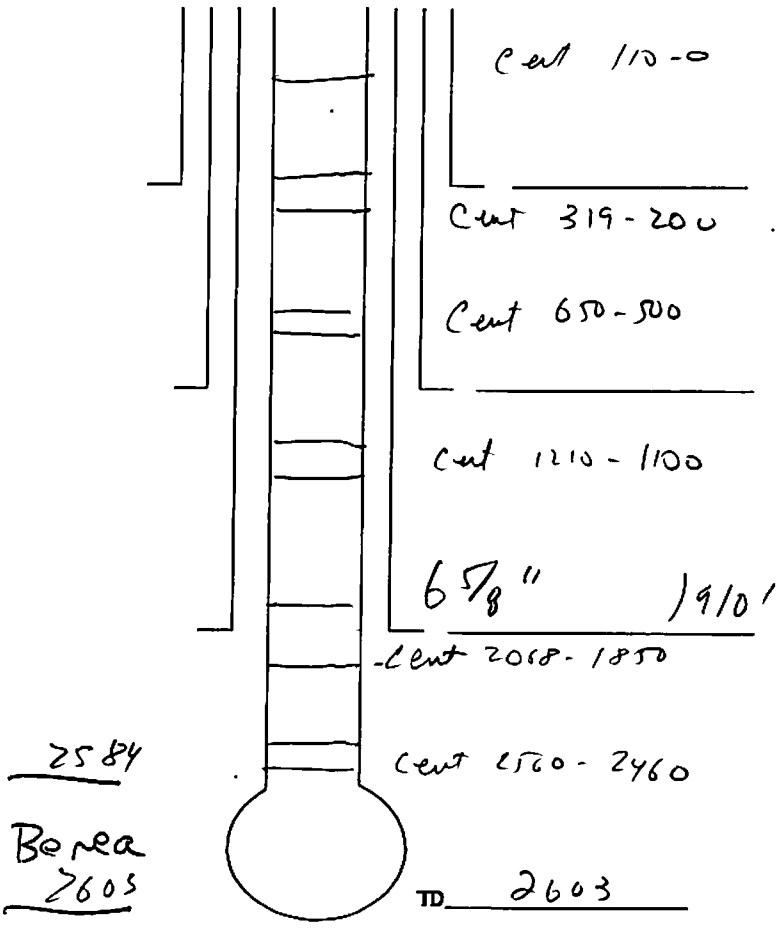
Ralph D Triplett
Title: District Inspector

OFFICIAL SEAL
NOTARY PUBLIC
STATE OF WEST VIRGINIA
TINA L. PETHTEL
East Resources, Inc
P. O. Box 5519
Vienna, West Virginia 26105
My Commission Expires Nov. 12, 2018

Maggie Fowler 3

Griffithsville Unit #2 Field

47-043- 02233



Perforate 6 5/8" casing - unable to pull

recovered 1925' 5 3/16" Csng

From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

(86)

AOR - Well Review Checklist

API Number: 47- 043 - 30249 Area Permit Number: 2R AP

Operator Name: H 6 Energy

Operator's Well #: 4

Farm Name: Maggie Fowler

Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐

Well Status: Active ☐ Abandoned ☐ Plugged ☒

TD of well: 2353

Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐

Easting: 417,575 Northing: 4,232,082

Elevation: 270

Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**

Bottom Hole Injection Pressure **0**

Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:

Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

Drilling Commenced [illegible] 1914, Completed [illegible]

Cost per foot, 1.15 Contractor, Hawkey & Swisher Oil Co Address, Glenville W. Va.

Drillers' Names Guy Sanders & Will Rodgers.

CONDUCTOR AND CASING USED IN DRILLING

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅛ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 3-16-Inch	4⅛ Inch
15'						1655'				

CONDUCTOR AND CASING LEFT IN WELL

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅛ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 3-16 Inch	4⅛ Inch
15'						1655' pulled				

OIL WELL / GAS WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods		Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Press
1/17/14	80 qts.									

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Conductor		15'	15'	Shot 1/17/14 - 90 qts - Berea.
Sand	15'	25'	10'	
Red Rock	25'	45'	20'	
Slate	45'	70'	25'	47-043-30249
Sand	70'	150'	80'	
Slate	150'	210'	60'	
Sand	210'	280'	70'	385' 10" hole.
Coal	280'	283'	3'	
Sand	283'	395'	112'	
Slate	395'	485'	90'	(Licon 518-521 in W.O.)
Sand	485'	565'	80'	
Slate	565'	655'	90'	
Sand	655'	745'	90'	
Slate	745'	870'	125'	
Sand	870'	895'	25'	
Slate	895'	910'	15'	Gas at 1005'
Lime	910'	945'	35'	Hole full of Water at 1035'
Slate	945'	955'	10'	
Salt Sand	955'	1595'	640'	
Slate	1595'	1605'	10'	
Little Lime	1605'	1645'	40'	
Pencil Cave	1645'	1650'	5'	
Big Lime	1650'	1860'	210'	
Big Injun	1860'	1930'	70'	
Slate	1930'	1990'	60'	
Injun Shells	1990'	2080'	90'	
Slate	2080'	2267'	187'	
Shells	2267'	2307'	40'	
Brown Shale	2307'	2332'	25'	
Berea Sand	2332'	2353'	21'	

Abandoned 6/30/41

FORM OG-6

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

47,043 - 30249

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

Maggie Fowler, John Fowler, — COAL OPERATOR OR OWNER
Nitro, W. Va. — ADDRESS

— COAL OPERATOR OR OWNER
— ADDRESS

Maggie Fowler, John Fowler, — LEASE OR PROPERTY OWNER
Nitro, W. Va. — ADDRESS

SOUTH PENN NATURAL GAS COMPANY — WELL OPERATOR
Union Trust Building, Parkersburg, W. Va. — COMPLETE ADDRESS
January 12, 1942 — WELL AND LOCATION
Duval — District
Lincoln — County
Well No. 4
Maggie Fowler — Farm

STATE INSPECTOR SUPERVISING PLUGGING None

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

E. M. Lemasters and E. C. Tiffin 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 South Penn Natural Gas Co. well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 16th day of June, 1941, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD		FILLING MATERIAL		PLUGS USED	CASING	
FORMATION	CONTENT	FROM	TO	SIZE & KIND	CSG PULLED	CSG LEFT IN
Berea	Clay	2353	2312			
	Cement	2312	2302			
Permanent Bridge at		1960			1655' - 6-5/8"	
Big Injun	Clay	1960	1860			
Big Lime	Clay	1860	1630			
	Cement	1630	1620			
Little Lime	Clay	1620	1585			
	Cement	1585	1575			
Salt Sand	Clay	1575	935			
	Cement	935	925			
Permanent Bridge at		551				
	Clay	498	260			
	Cement	260	250			
	Clay & Rock	250	to surface			
COAL SEAMS				DESCRIPTION OF MONUMENT		
(NAME) No name	Cement	551	498	8-1/4" csg. 3' above surface.		
(NAME)				Filled with cement. Inscribed		
(NAME)				S.P.N.G.Co. Maggie Fowler #4.		
(NAME)				Abd. 6-30-41		

and that the work of plugging and filling said well was completed on the 30th day of June, 1941.

And further deponents saith not.

E M Lemasters
E C Tiffin

Sworn to and subscribed before me this 17th day of January, 1942.

H. A. Smith
Notary Public.

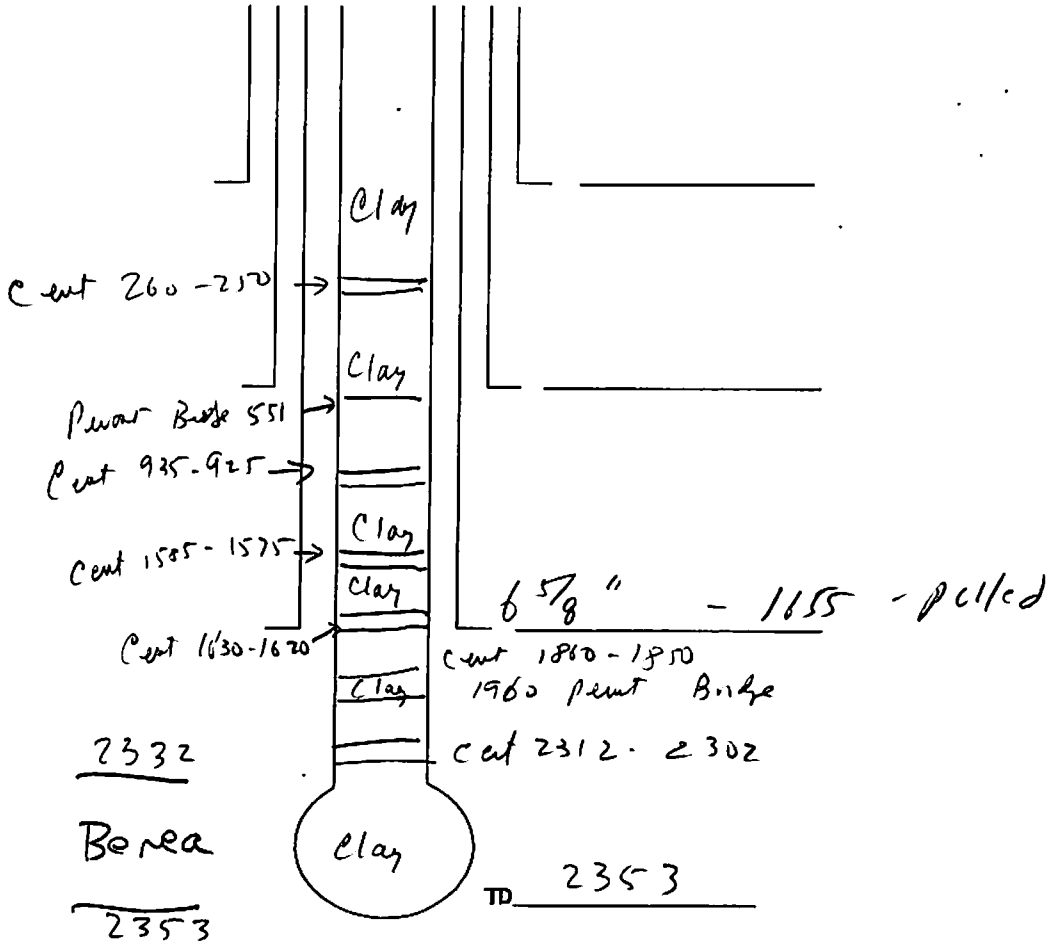
My commission expires: December 7, 1947

PERMIT No. LIN-249

Mossie Fowler 4

Griffithsville Unit #2 Field

47-043- 30245



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

87

AOR - Well Review Checklist

API Number: 47- 043 - 31055 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 5
Farm Name: Maggie Fowler
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2482
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 417,681 Northing: 4,232,065
Elevation: 300
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

3/055

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

WELL RECORD

Permit No. _____ Oil or Gas Well _____ (KIND)

Company G. S. & H. Supply Company
Address Griffithsville, W. Va.
Farm Maggie Fowler Acres 45
Location (waters) Deer Fork
Well No. 5 Elev. 992.47t
District Duval County Lincoln
The surface of tract is owned in fee by _____
_____ Address _____
Mineral rights are owned by _____
_____ Address _____
Drilling commenced _____
Drilling completed --
Date Shot _____ From _____ To _____
With _____
Open Flow /10ths Water in _____ Inch
_____ /10ths Merc. in _____ Inch
Volume _____ Cu. Ft.
Rock Pressure _____ lbs. _____ hrs.
Oil _____ bbls., 1st 24 hrs.
Fresh water _____ feet _____ feet
Salt water _____ feet _____ feet

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			
16			Kind of Packer
13			
10			Size of
8¼			
6⅝	1805	1805	Depth set
5 3/16			
3			Perf. top
2	2474	2474	Perf. bottom
Liners Used			Perf. top
			Perf. bottom

CASING CEMENTED ____ SIZE ____ No. Ft. ____ Date

COAL WAS ENCOUNTERED AT ____ FEET ____ INCHES
____ FEET ____ INCHES ____ FEET ____ INCHES
____ FEET ____ INCHES ____ FEET ____ INCHES

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks
Little Lime			1750	1760			
Pencil Cave			1760	1785			
Big Lime			1785	1800			
Big Injun			1800	1960			
Brown Shale			1960	2040			
Berea Sand			2440	2462			
Total Depth			2463	2462			

AUG 1951 WEST VIRGINIA DEPARTMENT OF MINES

(Over)

31055

FORM DG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

LEASE OR PROPERTY OWNER

ADDRESS

G. S. H. Supply Co.
NAME OF WELL OPERATOR
Griffithsville, W. Va.
COMPLETE ADDRESS
Feb. 9, 1952
WELL AND LOCATION
Duval District
Lincoln County
Well No. 5
Maggie Fowler Farm
STATE INSPECTOR SUPERVISING PLUGGING Dana E. Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

J. C. McAllister and E. A. Record 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 G. S. H. Supply Co. well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 1 day of Oct., 19 52, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD		FILLING MATERIAL		PLUGS USED	CASING	
FORMATION	CONTENT	FROM	TO	SIZE & KIND	CSG PULLED	CSG LEFT IN
	Set bridge	2430'		7"	1595'	1605'
	neat cement	2430'	2420'	2"	2474'	None
	Crushed Stone	5'				
	filled with cl	2135'	2339'			
	neat cement	2330'	2320			
	per. bridge	2050'				
	neat cement	2050'	2040			
	crushed stone	5'				
	killed with clay	2035'	1835'			
	neat cement	1835'	1825			
	crushed stone	5'				
	set bridge	1200'				
	neat cement	1200'	1190			
	crushed stone	5'				
	filled with clay	1185'	1060'			
	neat cement	1060'	1050'			
	per. bridge	400'				
	4 bags cement	400'	390'			
COAL SEAMS	crushed stone	5'		DESCRIPTION OF MONUMENT		
	Filled with clay to surface			Erected marker according to rule		
				18, 1931 regulations.		

and that the work of plugging and filling said well was completed on the 8 day of Oct., 1952

And further deponents saith not.

J. C. McAllister
E. A. Record

Sworn to and subscribed before me this 13 day of Feb., 1952

J. E. Lawson
Notary Public.

My commission expires Oct. 7, 1954

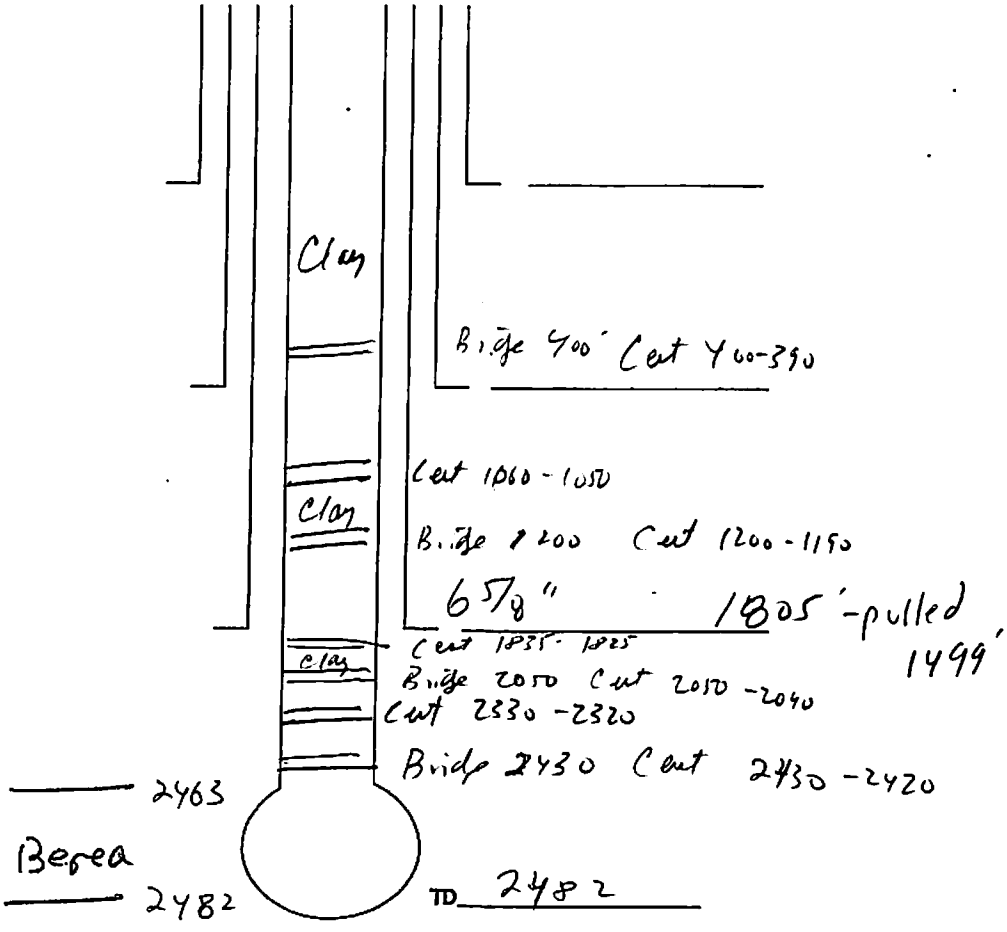
Permit No. Lin. - 1055

FEB 1952 WEST VIRGINIA DEPARTMENT OF MINES

Maggie Bowler #5

Griffithsville Unit #2 Field

47-043- 3105



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/1/16

(88)

AOR - Well Review Checklist

API Number: 47- 043 - 30610 Area Permit Number: 2R AP

Operator Name: H 6 Energy

Operator's Well #: 6

Farm Name: Maggie Fowler

Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐

Well Status: Active ☐ Abandoned ☐ Plugged ☒

TD of well: 2435

Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐

Easting: 417,508 Northing: 4,231,980

Elevation: 284

Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = 0

Bottom Hole Injection Pressure 0

Hydrostatic Pressure 0

Comments:

Reviewer Name: Signature:

Date Reviewed:

** Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-30610

RECORD of Well No. 6 on Wenger Fowler Farm Acres

Grille Field, Doddridge District Lincoln County

Commenced ..... 19..., Completed ..... 19...

Drilling Commenced Nov 13 1916 Completed Dec 18 1916

Cost per foot, 12½ Contractor Boone Drilling Co. Address,

Drillers' Names J.W. English & H.W. Gastineau

CONDUCTOR AND CASING USED IN DRILLING

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅝ Inch	6⅝ Inch	6¼ Inch	5⅜ Inch	5 3-16-Inch	4½ Inch
12						1745				

CONDUCTOR AND CASING LEFT IN WELL

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅝ Inch	6⅝ Inch	6¼ Inch	5⅜ Inch	5 3-16 Inch	4½ Inch
12						1745				

OIL WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods
2/21/16	80 qts.			

GAS WELL

Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Clay		12	12	El. 940
Sand	12	50	38	
Red Rock	50	75	25	Reduced hole from 10" to 8"
Sand	75	125	50	at 365
White Slate	125	175	50	
Sand	175	225	50	Gas at 1060'
Slate	225	250	25	
Sand	250	365	115	Hole full salt Water
Slate	365	400	35	at 1100'
Sand	400	550	150	
Slate & Sand	550	1060	510	
Salt Sand	1060	1700	640	
Black Lime	1700	1734	34	
Pencil Cave	1734	1740	6	
White Lime	1740	1925	185	
Big Injun	1925	1985	60	
Slate	1985	2100	115	
Shelly	2100	2225	125	
Slate	2225	2350	125	
Slate & Shells	2350	2395	45	
Coffee Shale	2395	2415	20	
Berea Grit	2415	2435	20	

47-043-30610

47.043-30610

FORM OG-6

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE. ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER	C. E. DeLay
ADDRESS	NAME OF WELL OPERATOR P. O. Box 49 Hamlin, W. Va.
COAL OPERATOR OR OWNER	COMPLETE ADDRESS March 15, 1949
ADDRESS	WELL AND LOCATION Duval District
South Penn Natural Gas Co.	Lincoln County
LEASE OR PROPERTY OWNER Parkersburg, W. Va.	Well No. 6
ADDRESS	Maggie Fowler Farm
STATE INSPECTOR SUPERVISING PLUGGING	D. E. Larson

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

C. E. DeLay and Guadalupe Saenz

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 C. E. DeLay, well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 26 day of February, 1949, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD	FILLING MATERIAL			PLUGS USED	CASING	
FORMATION	CONTENT	FROM	TO	SIZE & KIND	CSG PULLED	CSG LEFT IN
Permanent	Bridge	2400	2395			
	Cement	2395	2385			
	Stone	2385	2380			
	Clay	2380	2200			
	Cement	2200	2190			
Permanent	Bridge	1990	1985			
	Cement	1985	1975			
	Stone	1975	1970			
	Red Clay	1970	1775			
	Cement	1775	1765			
	Stone	1765	1760			
Pulled 6-5/8"	casing loose and out as hole was filled				6-5/8"	1745
Permanent	Bridge	1355	1350			
	Cement	1350	1340			
	Stone	1340	1335			
COAL SEAMS	Clay	1335	1040	DESCRIPTION OF MONUMENT		
	Cement	1040	1030	18"X18"X50" Concrete Block		
Permanent	Bridge	330	290	March 2, 1949		
	Cement	330	290			
	Stone	290	285			
	Filled with clay to surface					

and that the work of plugging and filling said well was completed on the 2 day of March, 1949

And further deponents saith not.

Guadalupe Saenz
C. E. DeLay

Sworn to and subscribed before me this 18 day of April, 1949.

T. S. Bowers
Notary Public.

My commission expires: Aug. 16-1949

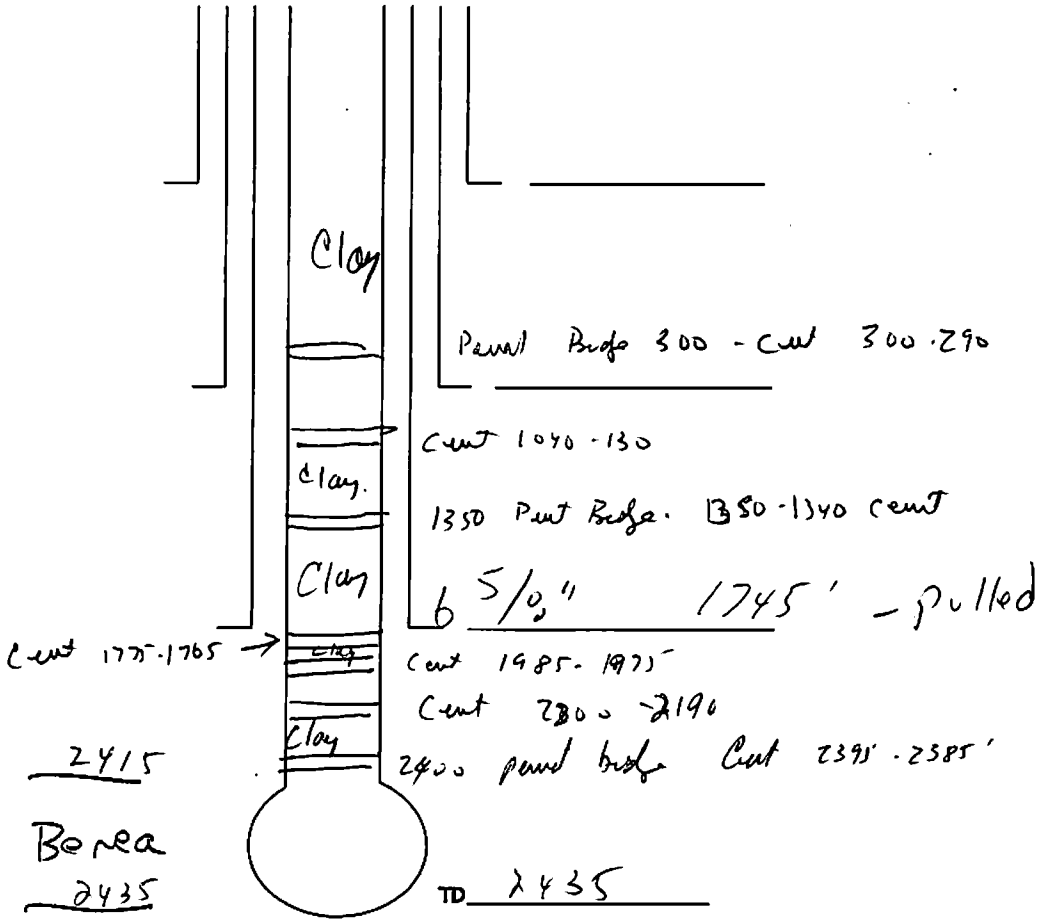
Permit No. Kan.-1610

APR 1949
WEST VIRGINIA
DEPARTMENT OF MINES

Maggie Dale 6

Griffithsville Unit #2 Field

47-043- 30610



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

(89)

AOR - Well Review Checklist

API Number: 47- 043 - 31056 Area Permit Number: 2R AP

Operator Name: H 6 Energy

Operator's Well #: 7

Farm Name: Mossie Fowler

Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐

Well Status: Active ☐ Abandoned ☐ Plugged ☒

TD of well: 2529

Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐

Easting: Northing:

Elevation:

Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = 0

Bottom Hole Injection Pressure 0

Hydrostatic Pressure 0

Comments:

Reviewer Name: Signature:

Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-31056

FORM GO-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

LEASE OR PROPERTY OWNER

ADDRESS

C. H. S. Supply Co.
NAME OF WELL OPERATOR

Gricksthville, W. Va.
COMPLETE ADDRESS

Feb. 26, 19 52
WELL AND LOCATION

Duval District

Lincoln County

Well No. 7

Maggie Fowler Farm

STATE INSPECTOR SUPERVISING PLUGGING Dave E. Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

and
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 C. S. H. Supply Co., well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 21 day of Sept., 19 51, and that the well was plugged and filled in the following manner:

COAL OR ZONE RECORD	FILLING MATERIAL	PLUGS USED	CASING	
FORMATION		SIZE & KIND	CSG PULLED	CSG LEFT IN
	set per. bridge 2485'	7"	119'	121'
	neat cement 2485' to 2475'	5"	1870'	none
	crushed stone 5'	2"	2571'	none
	filled with clay 2470' to 2385'			
	neat cement 2385' to 23 7'			
	set bridge 2075'			
	neat cement 2075' to 2065'			
	crushed stone 5'			
	filled with clay 2060' to 1870'			
	neat cement 1870' to 1865'			
	crushed stone 5'			
	set per. bridge 1250'			
	neat cement 1250' to 1240'			
	crushed stone 5'			
	filled with clay 1240' to 1110'			
	neat cement 1110' to 1100'			
	crushed stone 5'			
	Set Per. Bridge 400'			
	2 bags cement 400' to 390'			
COAL SEAMS	crushed stone 5'	DESCRIPTION OF MONUMENT		
(NAME)	Filled with clay to surface	Erected marker according to rule 18, 1931 regulations.		
(NAME)				
(NAME)				
(NAME)				

MAY 1952
WEST VIRGINIA
DEPARTMENT OF MINES

and that the work of plugging and filling said well was completed on the 26 day of Sept., 19 51.

And further deponents saith not.

E. L. Stephens
Ed. Reed

Sworn to and subscribed before me this 14 day of May, 19 52

J. R. Robinson
Notary Public.

My commission expires:
Oct-9-1957

Permit No. Lin-1056

No. of Well No. 7 on Maggie Fowler Farm Acres

Field, District County

Rig Commenced 19 , Completed 19

Drilling Commenced July 27 1914 Completed Aug 23 1914

Cost per foot, 1½ Contractor, Boone Drilling Co Address Hawley W. Va.

Drillers' Names J. H. Bennett & C. P. Brockover

CONDUCTOR AND CASING USED IN DRILLING

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅝ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 3-16-Inch	4⅞ Inch
16				400		1840				

CONDUCTOR AND CASING LEFT IN WELL

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅝ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 3-16 Inch	4⅞ Inch
16						1840				

OIL WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods	Size of Packer	Depth Set
8/24/14	80 qts.					

GAS WELL

Tubing	1st Minute Pressure	Rock Pressure

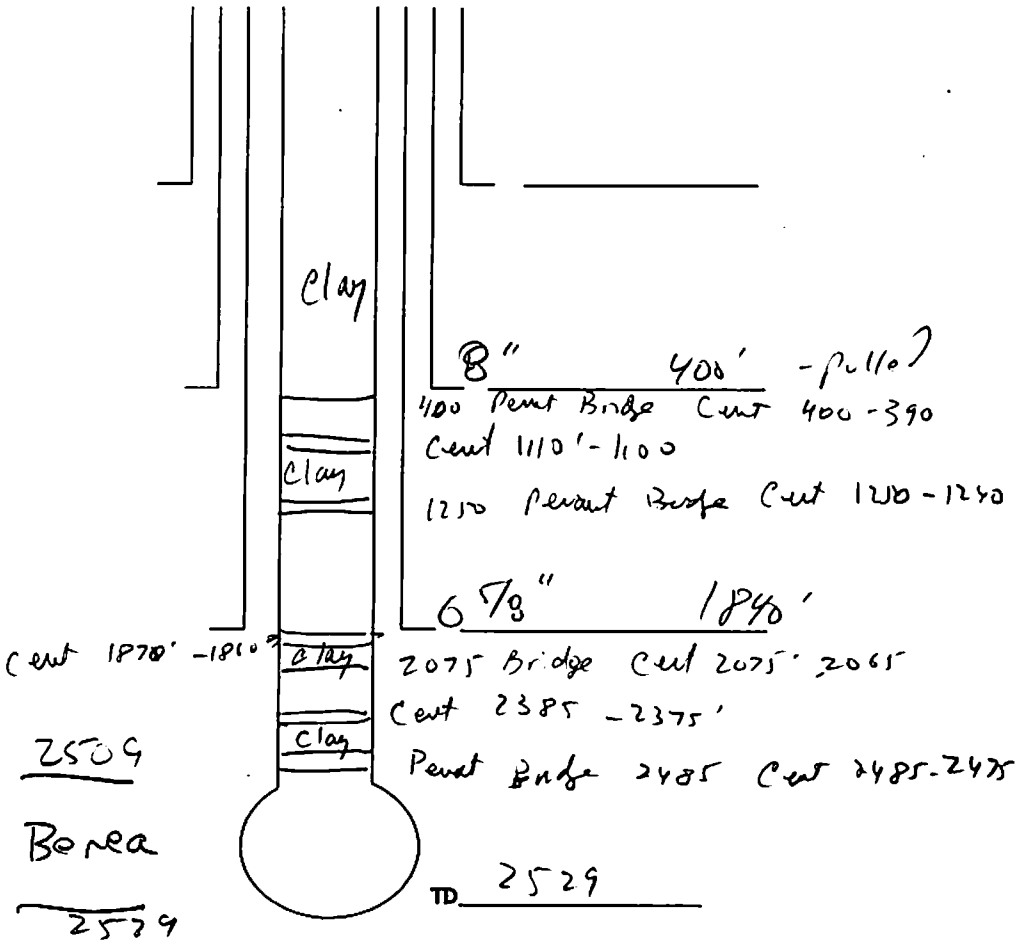
FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Soil		16	16	Shot 8/10/14 - 140 qts. - Bored.
Red Rock	16	26	10	
Sand	26	46	20	EI = 10 C.2
Slate	46	66	20	
Red Rock	66	106	40	
Sand	106	156	50	
Slate	156	196	40	
Sand	196	276	80	Little Gas & ½ bailer wate
Black Slate	276	296	20	an hr. at 600'
Sand	296	386	90	
Black Slate	386	486	100	
Slate & Shells	486	526	40	
Sand	526	600	74	Hole full salt Water at
Lime Shells	600	620	20	
Slate	620	700	80	
Sand	700	800	100	
White Slate	800	880	80	
Sand & Lime	880	955	75	
White Slate	955	1030	85	
Black Slate	1030	1130	100	
Salt Sand	1130	1795	665	
Black Lime	1795	1825	30	
Pencil Cave	1825	1830	5	
White Lime	1830	2010	180	
Big Injun Sand	2010	2075	65	
Slate	2075	2155	80	
Shells	2155	2235	80	
Slate & Shells	2235	2487	252	
Brown Shale	2487	2509	22	Shut down for Brown
Brea Sand	2509	2529	20	Sept 14-1914

47-043-31056

Massie Fuller

Griffithsville Unit #2 Field

47-043- 31056



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

(90)

AOR - Well Review Checklist

API Number: 47- 043 - 70250 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 1
Farm Name: Robert Fowler
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2500
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 417,104 Northing: 4,231,825
Elevation: 307
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☐

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

need wr 38
- not Available

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-70250

RECORD of Well No. 1 on Burt Tuttle Farm Acres ✓

Field, District County,

Drilling Commenced 19, Completed 19

Drilling Commenced July 7 1910. Completed Aug 22 1910

Cost per foot, 1.15 Contractor, Kinsley & Herman Drl Address, Kinsley Kans

Drillers' Names, Chas Gould & J H Lovell

CONDUCTOR AND CASING USED IN DRILLING.

	13 inch	10 inch	8¼ inch	8 inch	7¼ inch	6⅝ inch	6¼ inch	5⅝ inch	5 3-16 inch	4¾ inch
Conductor										
16						1815				

CONDUCTOR AND CASING LEFT IN WELL.

	13 inch	10 inch	8¼ inch	8 inch	7¼ inch	6⅝ inch	6¼ inch	5⅝ inch	5 3-16 inch	4¾ inch
Conductor										
16						1815				

OIL WELL **GAS WELL**

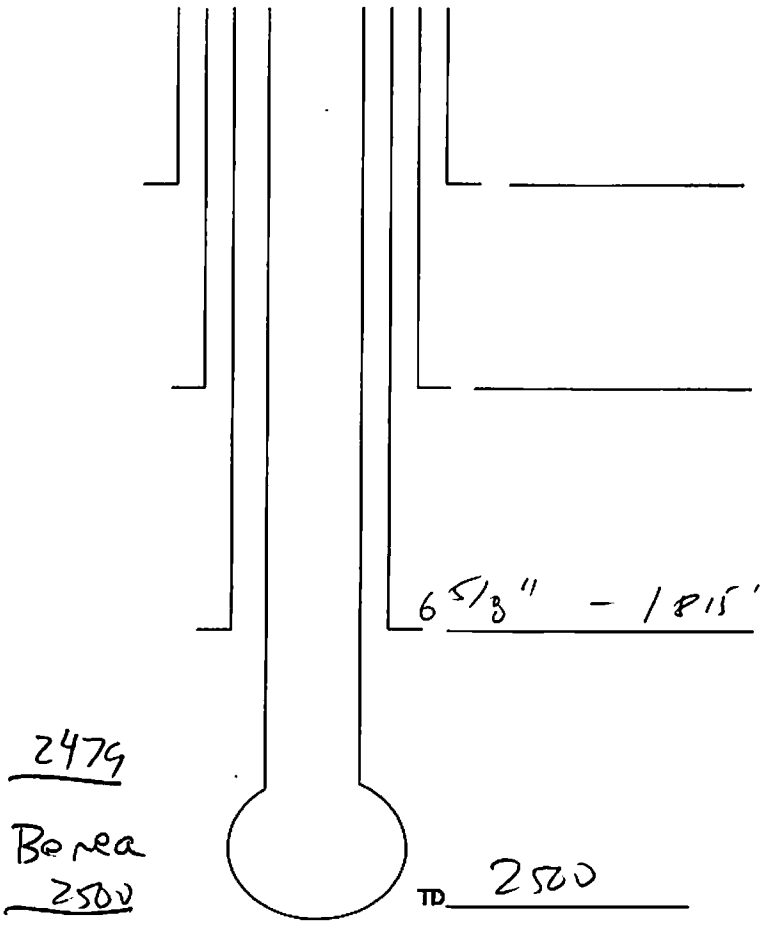
When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods	Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure
8/24/10	30 qts	2nd 460 bbls	1 1/2	1 1/4					

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Soil & Clay		16	16	
Red Rock	16	56	40	
Lime	56	106	50	
Slate	106	196	90	
Sand	196	256	60	
Slate	256	356	100	
Sand	356	416	60	
Lime	416	420	4	4.25' 10" Gas
Slate & Shells	420	1050	660	
Lime	1050	1126	40	
Slate & Shells	1126	1720	600	Salt Water @ 1200
Lime	1720	1740	20	
Hard Lime	1740	1755	15	
Lime	1755	1760	5	
White Lime	1760	1802	42	
Red Rock	1802	1805	3	
Blue Shale	1805	1990	185	
Blue Sand	1990	2065	75	
Lime	2065	2125	60	
Lime & Shells	2125	2285	160	
Lime	2285	2459	174	ABANDONED
Broken Lime	2459	2479	20	
Blue Sand	2479	2500	21	JUN 29 1928
6⅝				
Casing Left	1815			
6 5/8	1815			

Robert Fowler

Griffithsville Unit #2 Field

47-043- 70250



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

(91)

AOR - Well Review Checklist

API Number: 47- 043 - 70251 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 2
Farm Name: Robert Router
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2494
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 417,287 Northing: 4,231,834
Elevation: 313
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☐

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Need WR 38 - not Available

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47.043 - 70251

RECORD of Well No. 2 on Robt Fowler Farm Acres

Field, District County,

Rig Commenced 19, Completed 19

Drilling Commenced June 26 1911, Completed Aug 15 1911

Cost per foot, 12½ Contractor, Hartley & Thomas Drl Co. Address, Hartley, W. Va.

Drillers' Names, R. H. Lobell & J. E. Hartley.

CONDUCTOR AND CASING USED IN DRILLING.

Conductor	13 inch	10 inch	8¼ inch	8 inch	7⅝ inch	6⅝ inch	6¼ inch	6¼ inch	6 5/16 inch	4¾ inch
14				415'		1510		1876'3"		

CONDUCTOR AND CASING LEFT IN WELL.

Conductor	13 inch	10 inch	8¼ inch	8 inch	7⅝ inch	6⅝ inch	6¼ inch	6¼ inch	6 5/16 inch	4¾ inch
14						1390 ~~1510~~		—		

OIL WELL **GAS WELL**

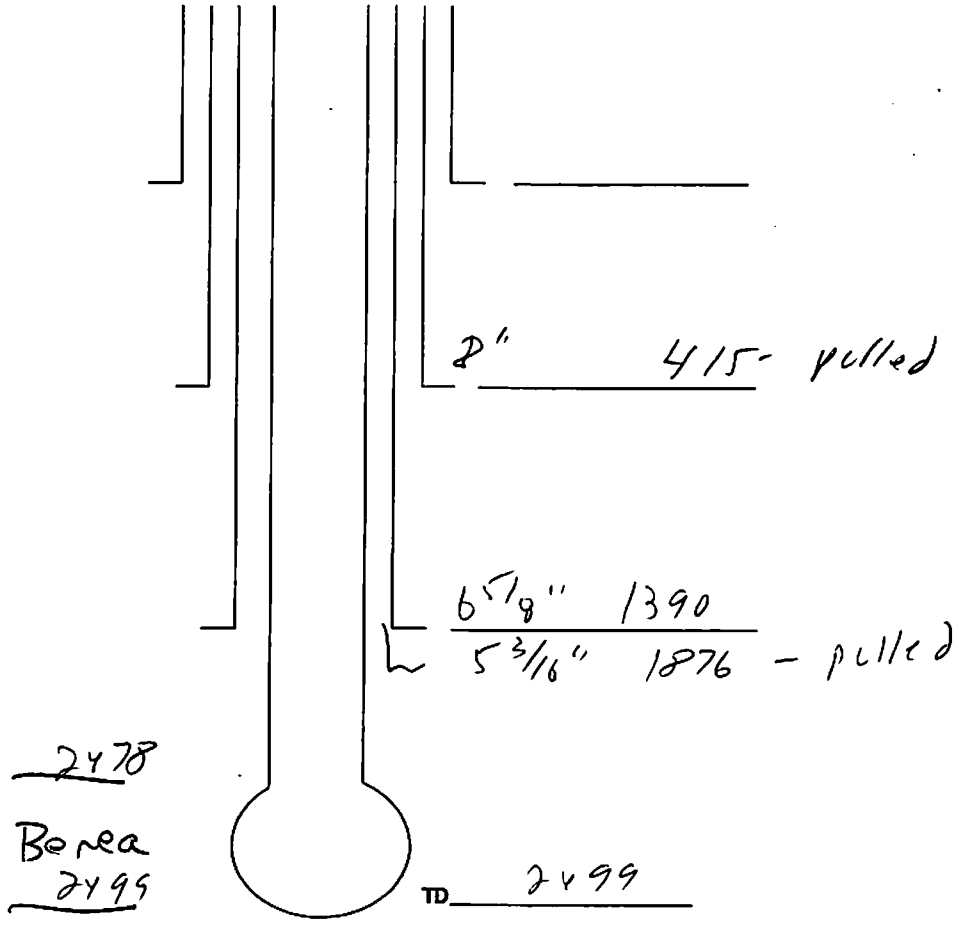
Shot	Size of Torpedo	1st Day's Production	Tubing	Rods		Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure
1057 11	90 qts.									

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Soil & Clay		14	14	Gas at 1115'
Sd. Gas R	14	34	40	
Slate	34	74	20	
Sd. Gas R	74	134	60	
Sand	134	184	50	
Slate	184	274	90	
Sand	274	354	80	
Slate	354	410	56	
Coal	410	413	3	
Slate	413	473	60	
Sand	473	555	82	
Coal	555	558	3	
Slate & Sand	558	1090	532	Salt Sand at 1185'
Salt Sand	1090	1740	650	
Slate	1740	1755	15	
Little Lime	1755	1795	40	
Pencil Cave	1795	1800	5	
Big Lime	1800	1950	150	ABANDONED
Big Injun	1950	2060	80	NOV 28 1928
Slate	2060	2120	60	
Gas Sand	2120	2180	60	
Slate	2180	2458	278	
Brown Lime	2458	2478	20	
Pencil Cave	2478	2499	21	

Robt Fowler 2

Griffithsville Unit #2 Field

47-043- 70251



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

92

AOR - Well Review Checklist

API Number: 47- 043 - Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 3
Farm Name: Robert Toulis
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2518
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 416,943 Northing: 4,231,764
Elevation: 315
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☐

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Need WR 38 - NA
No API

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

of Well No. 3 on Robert Fowler Farm Acres

Field, District County,

Rig Commenced 19 Completed 19

Drilling Commenced March 25 1911 Completed May 11 1911

Cost per foot, 1.15 Contractor, Hughey & Inman Oil Co. Address, Hughey, W. Va.

Drillers' Names, J. B. Mabe & E. R. Lovell

CONDUCTOR AND CASING USED IN DRILLING.

Conductor	13 inch	10 inch	8¼ inch	8 inch	7½ inch	6½ inch	6¼ inch	5½ inch	5 3-16 inch	4½ inch
14						1826 1825				

CONDUCTOR AND CASING LEFT IN WELL.

Conductor	13 inch	10 inch	8¼ inch	8 inch	7½ inch	6½ inch	6¼ inch	5½ inch	5 3-16 inch	4½ inch
14						1825				

OIL WELL

GAS WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods		Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure
5/12/11	90 qts.	2 mls Hard	3/16	1200 ft						

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Soil		14	14	El = 1028.88
Sand	14	34	20	
Red Rock	34	94	60	
Slate	94	134	40	
Sand	134	184	50	
Slate	184	254	70	
Sand	254	294	40	
Slate	294	384	90	465' of 10" hole
Sand	384	430	46	
Coal	430	433	3	
Slate	433	513	80	
Sand	513	600	87	
Coal	600	602	2	
Sand & Slate	602	1080	478	
Slate	1080	1120	40	hole full of water at 1200
Salt Sand	1120	1710	590	
Slate	1710	1725	15	
Red Rock	1725	1740	15	
Black Lime	1740	1755	15	
Slate	1755	1765	10	
Little Lime	1765	1805	40	
Pencil Cave	1805	1810	5	
Big Lime	1810	1990	180	
Big Injun	1990	2060	70	
Slate	2060	2120	60	
Lime Shells	2120	2220	100	
Slate	2220	2478	258	
Brown Shale	2478	2498	20	
Berea Sand	2498	2518	20	

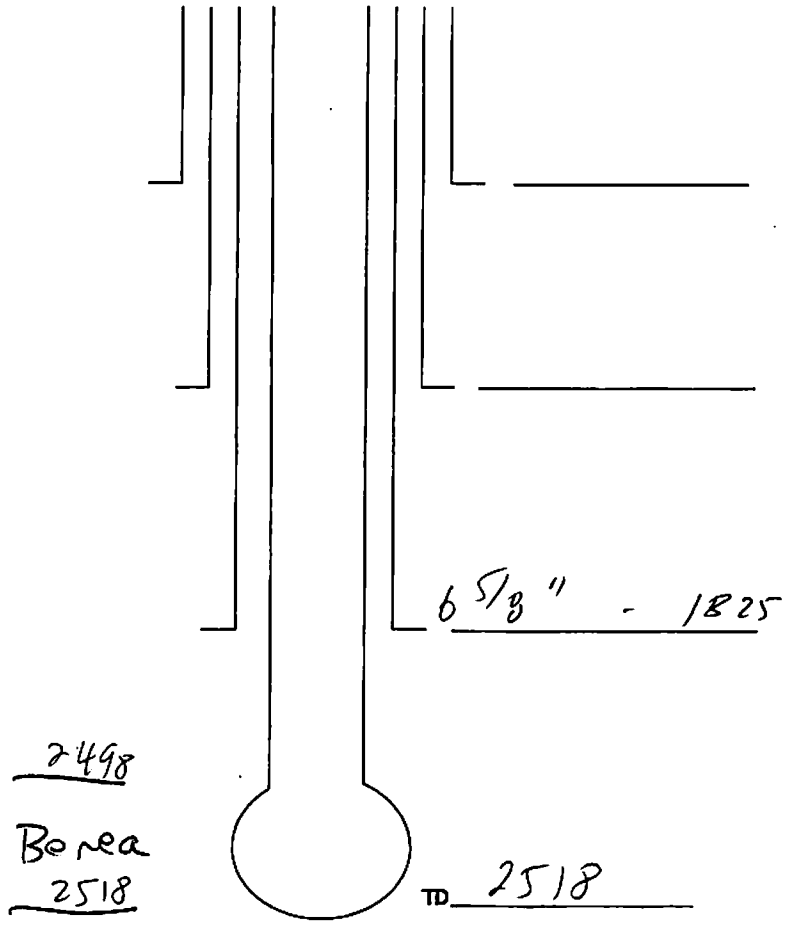
ABANDONED

JUN 15 1921

Robert Fowler 3

Griffithsville Unit #2 Field

47-043-



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

(92)

AOR - Well Review Checklist

API Number: 47- 043 - 31035 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 4
Farm Name: Robert Fouler
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2508
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 417,109 Northing: 4,231,344
Elevation: 314
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

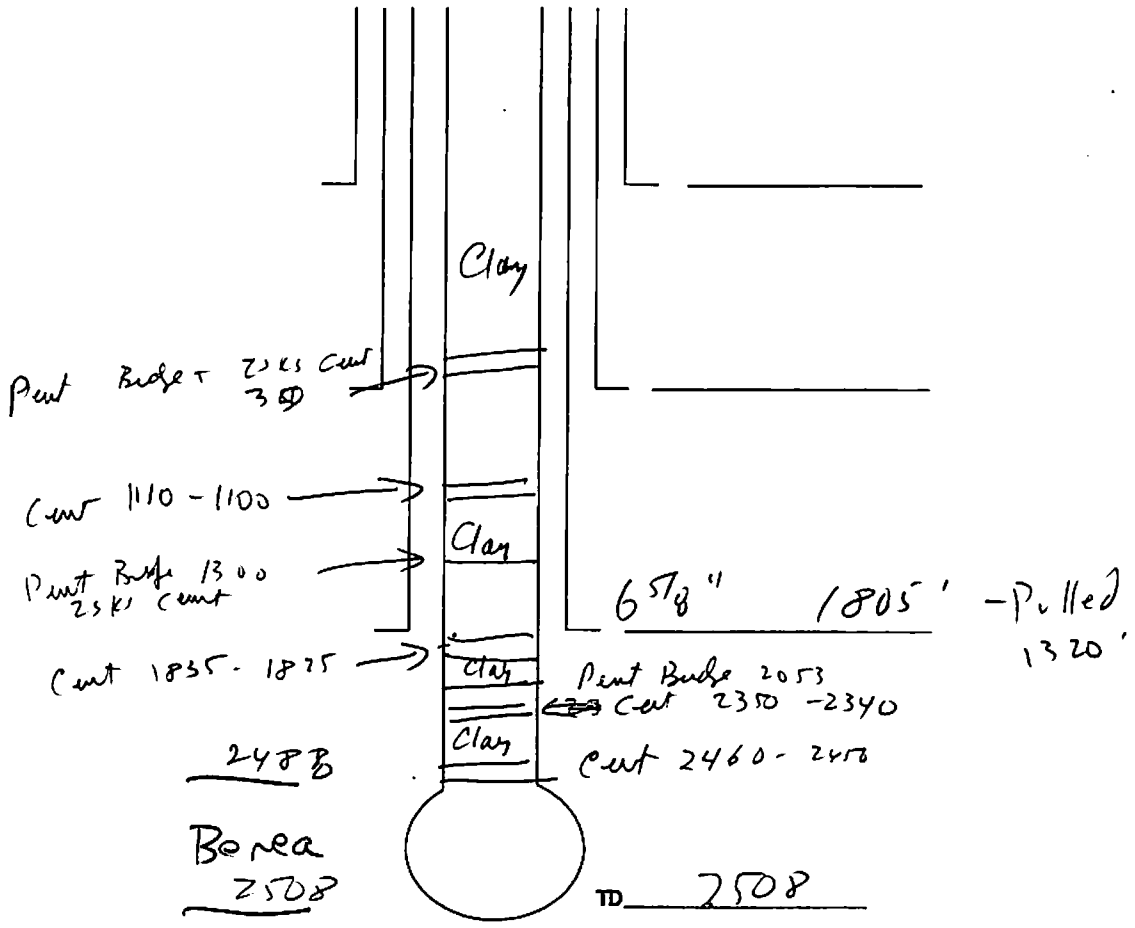
Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

Robert Fowler 4

Griffithsville Unit #2 Field

47-043- 31035



From Drillers Records/Plugging Records

47-043-31035

RECORD of Well No. 4 on Bobt Fowler Farm ... Acres ...

... Field, ... District ... County, ...

Commenced ... 19..., Completed ... 19...

Drilling Commenced May 18 1911, Completed July 7 1911

Cost per foot, 1.15 Contractor, Hughes & Simmons Oil Co. Address, Spencer, W. Va.

Drillers' Names, Dell Rodgers & S. H. Lowe

CONDUCTOR AND CASING USED IN DRILLING.

Conductor	13 inch	10 inch	8¼ inch	8 inch	7½ inch	6½ inch	6¼ inch	5¼ inch	5 inch	4¼ inch
16						1805'				

CONDUCTOR AND CASING LEFT IN WELL.

Conductor	13 inch	10 inch	8¼ inch	8 inch	7½ inch	6½ inch	6¼ inch	5¼ inch	5 inch	4¼ inch
16						1805'				

OIL WELL **GAS WELL**

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods	Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure
7/8/11	90 qts.	2nd Shot 5½ hrs 150 qts.							

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Soil & clay		16	16	
Sand	16	36	20	
Red Rock	36	96	60	
Slate	96	136	40	
Sand	136	186	50	
Slate	186	276	90	
Sand	276	336	60	
Slate	336	405	69	
Coal	405	410	5	410' of 10" hole
Slate & Sand	410	585	175	
Coal	585	587	2	
Slate & Sand	587	1130	543	
Salt Sand	1130	1710	580	
Slate	1710	1730	20	
Red Rock	1730	1740	10	
Slate	1740	1760	20	Hole full of Water at 1185'
Fifth Sand	1760	1795	30	
Pencil Cave	1795	1798	3	
Big Lime	1798	1973	175	
Big Injun	1973	2053	80	
Slate	2053	2123	70	
Sayger	2123	2213	90	
Slate	2213	2468	255	
Brown Shale	2468	2488	20	
Berea Sand	2488	2508	20	

47.043 - 31035

FORM OG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

LEASE OR PROPERTY OWNER

ADDRESS

Ga Ga U. Supply Co.
NAME OF WELL OPERATOR

Griffithsville, W.Va.
COMPLETE ADDRESS

August 17, 1951 19

WELL AND LOCATION

Duval District

Lincoln County

Well No. 1

Robert Fowler Farm

STATE INSPECTOR SUPERVISING PLUGGING Dana Ingram

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Kanawha } ss:

Frank Pack and Merle Pack 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 Ga Ga U. Supply Co., well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 5 day of August, 19 51, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD		FILLING MATERIAL			PLUGS USED	CASING	
FORMATION		CONTENT	FROM	TO	SIZE & KIND	CSG PULLED	CSG LEFT IN
Maxton Shale		2 thick cement	2450				
		5' stone clay		2350		1320	485
		Neat cement	2350	2342			
Pen. Bridge							
Big Injun		2 cement 5' stone clay	2053	1935			
		Neat cement	1935	1820			
		5' stone					
Salt Sand		2 cement 5' stone on Pen. Bridge	1300				
		clay		1130			
		Neat Cement	1110	1100			
Pen. Bridge		2 cement 5' stone	350'				
		clay		Surface			
COAL SEAMS					DESCRIPTION OF MONUMENT		
(NAME)					Marker as described in		
(NAME)					rule 26		
(NAME)							
(NAME)							

and that the work of plugging and filling said well was completed on the 17 day of August, 1951

And further deponents saith not.

Frank Pack
Merle Pack

Sworn to and subscribed before me this 4 day of December, 1951.

J. R. Osborne
Notary Public.

My commission expires: 5-9-1957

Permit No. Ka 1035

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

WVDEP OOG Internal Use Only
Rev. 6/14/16

(94)

AOR - Well Review Checklist

API Number: 47- 043 - 0 2234 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 5
Farm Name: Robert Fowler
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2295
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 416,825 Northing: 4,231,355
Elevation: 246
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒ #

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-02234

RECORD of Well No. 5 on Robert Fowler Farm Acres

Field, District County

...g Commenced 19 , Completed 19

Drilling Commenced 19 , Completed July 31 1912

Cost per foot, 1.15 Contractor, Hawley & Associated Oil Co. Address, Hawley W.Va.

Drillers' Names E. H. Robertson & G. H. Lowell

CONDUCTOR AND CASING USED IN DRILLING

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅝ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 3-16-Inch	4½ Inch
16				350'		1600				

CONDUCTOR AND CASING LEFT IN WELL

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅝ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 3-16 Inch	4½ Inch
16						1600				

OIL WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods
8/1/12	80 qts	2nd Shot 3/20/14		150 qts

GAS WELL

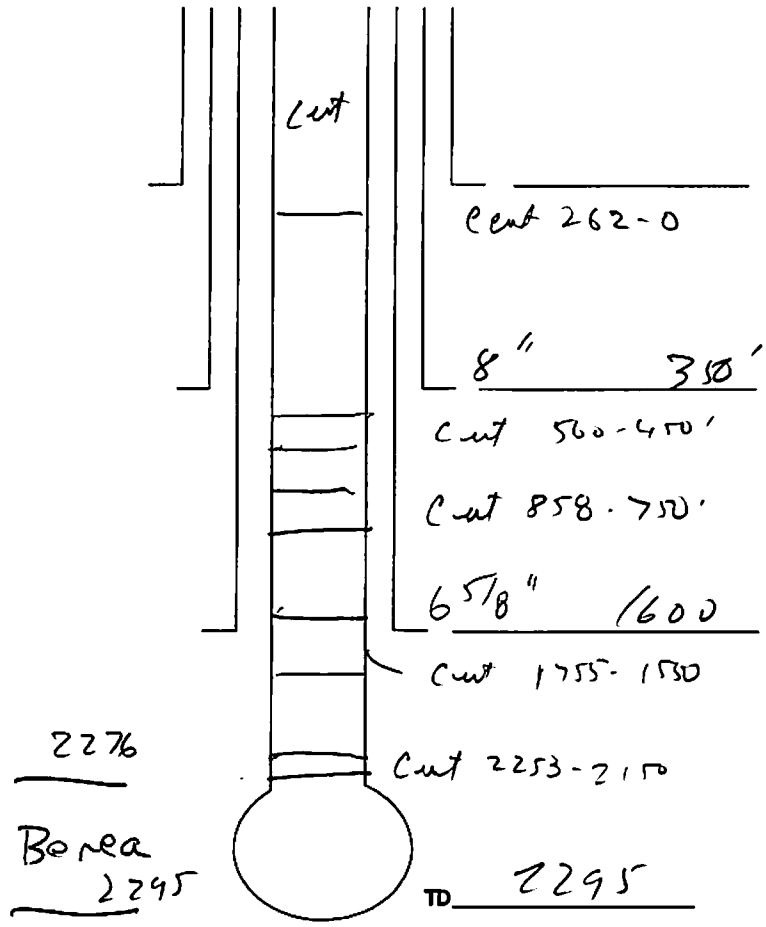
Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Conductor		16	16	
Slate	16	100	84	
Sand	100	125	25	
Slate	125	200	75	
Coal	200	204	4	
Slate	204	344	140	
Sand	344	494	150	
Slate & Shells	494	594	100	
Sand	594	650	56	
Slate & Shells	650	880	230	
Lime & Sand	880	1550	670	Hole full of water at 980
Slate	1550	1560	10	
Little Lime	1560	1590	30	
Pencil Cave	1590	1595	5	
Big Lime	1595	1755	160	
Big Injun	1755	1830	75	
Slate	1830	1890	60	
Keener Sand	1890	1990	100	
Slate	1990	2256	266	
Brown Shale	2256	2276	20	
Pyrite Sand	2276	2295	19	

Robert Fowler 5

Griffithsville Unit #2 Field

47-043- 0 2234



1533' 5 3/16 pulled
Unable to pull 6 5/8 - perforated

From Drillers Records/Plugging Records

WWR-38

API# 47-043-2234

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY
DIVISION 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: Robert Fowler
LOCATION: Elevation: 810'
District: Duval
Latitude:
Longitude:

Operator Well No.: No. 5
Quadrangle: Griffithsville 7.5'
County: Lincoln
Deg. Min. Sec.
Deg. Min. Sec.

Well Type: Oil X Gas WIW

Company: East Resources Inc.
P.O. Box 5519
Vienna, WV 26105
Agent: Philip S. Ondrusek
Inspector: Ralph Triplett
Permit Issued: 7/23/09'

Coal Operator or Owner: NA

Coal Operator or Owner: NA

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Wood ss:
Mark Miller and Paul Stephens 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 East Resources Inc., well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 17th day of August, 2009, and that the well was plugged and filled in the following manner:

TYPE	FROM	TO	PIPE REMOVED	LEFT
Cement	2253'	2150'	6 5/8" 0'	1600'
Cement	1755'	1550'	5 3/16" 1533'	0'
Cement	858'	750'		
Cement	560'	450'		
Cement	262'	0		
		Perforated 6 5/8" Casing - 3 Shots 802'-798', 502'-498',		
		204'-200' & 107'-98'		
6% Gel Between Cement Plugs				

Description of monument: 5" x 5'
and that the work of plugging and filling said well was completed on the 1st day of September, 2009'
And further deponents saith not.

Mark Miller
Roger McClamrock

Sworn and subscribe before me this 4th day of September 2009

My commission expires: Oct. 4, 2016

Notary Public

Affidavit reviewed by the Office of Oil and Gas:

Ralph D. Triplett
Title: District Inspector

OFFICIAL SEAL
NOTARY PUBLIC
STATE OF WEST VIRGINIA
S. DIANNE DULANEY
P. O. Box 5519
Vienna, West Virginia 26105
My Commission Expires Oct. 4, 2016

WVDEP OOG Internal Use Only
Rev. 6/14/16

(95)

AOR - Well Review Checklist

API Number: 47- 043 - 31044 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 6
Farm Name: Robert Fowler
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2493
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 417,250 Northing: 4,231,559
Elevation: 305
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = 0
Bottom Hole Injection Pressure 0
Hydrostatic Pressure 0

Comments:

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-31044

RECORD of Well No. 6 on Ralph Fowler Farm Acres

Field, District County

Rig Commenced 19, Completed 19

Drilling Commenced Nov 13 1912, Completed June 6 1913

Cost per foot, 1½ Contractor, Hacker & Fowler Address,

Drillers' Names

CONDUCTOR AND CASING USED IN DRILLING

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅝ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 3-16-Inch	4⅝ Inch
13						1815'				

CONDUCTOR AND CASING LEFT IN WELL

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅝ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 3-16 Inch	4⅝ Inch
13						1815'				

OIL WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods
1/9/13	80 qts			

GAS WELL

Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Conductor		13	13	Shot 8-19-29-50 qts Bruce Open flow
Pennsylvania	13	53	40	1003.24
Salt Sand	53	223	170	El=
Maxton	223	384	160	
Little Lime	384	410	26	
Pencil Cave	410	414	4	
Big Lime	414	494	80	440' of 10" Hole
Keener	494	619	125	
Big Injun	619	829	210	
Squaw	829	899	70	
Sunbury	899	1009	110	
Shale	1009	1100	91	Hole full of Water at 1165'
Berea Grit	1100	1760	660	
Little Lime	1760	1800	40	
Pencil Cave	1800	1805	5	
Big Lime	1805	1985	180	
Big Injun	1985	2055	70	
Shale	2055	2135	80	
Weir Sand	2135	2275	140	
Shale	2275	2455	180	
Berea Grit	2455	2473	18	
Berea Sand	2473	2493	20	

47-043 - 31044

FORM OG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

LEASE OR PROPERTY OWNER

ADDRESS

G. S. H. Supply Co.
NAME OF WELL OPERATOR
Griffithsville, W. Va.
COMPLETE ADDRESS

Dec. 2, 1951 19

WELL AND LOCATION

Duval District

Lincoln County

Well No. 6

Robert Fowler Farm Farm

STATE INSPECTOR SUPERVISING PLUGGING Dana Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

and
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 G. S. H. Supply Co.,
well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 1st day of Oct, 19 51, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD		FILLING MATERIAL		PLUGS USED	CASING	
FORMATION	CONTENT	FROM	TO	SIZE & KIND	CSG PULLED	CSG LEFT IN
	Set bridge	2450'		7	1815	~~1815~~ None
	2 sacks cement	2450'	2440'			
	crushed stone	5'				
	Clay	2350'				
	cement	2350'	2340'			
	bridge set	2050'				
	2 sacks cement					
	5' crushed stone					
	Filled with Clay	2035'	1845'			
	cement	1845'	1835'			
	crushed stone	5'				
	bridge set	1300'				
	neat cement	1300'	1290'			
	crushed stone	5'				
	clay	~~1295'~~	~~1290~~			
		1070'	1070'			
	Set bridge					
COAL SEAMS	2 bags cement-			DESCRIPTION OF MONUMENT		
(NAME)	crushed stone	5'		Erected marker according to		
(NAME)	filled with clay to surface			rule 15, 1931 regulation.		
(NAME)						
(NAME)						

and that the work of plugging and filling said well was completed on the 6 day of Oct, 19 51.

And further deponents saith not.

Carter Ruby
Field Inspector

Sworn to and subscribed before me this 9 day of January, 19 52.

J R Osburn
Notary Public.

My commission expires: 10-9-57

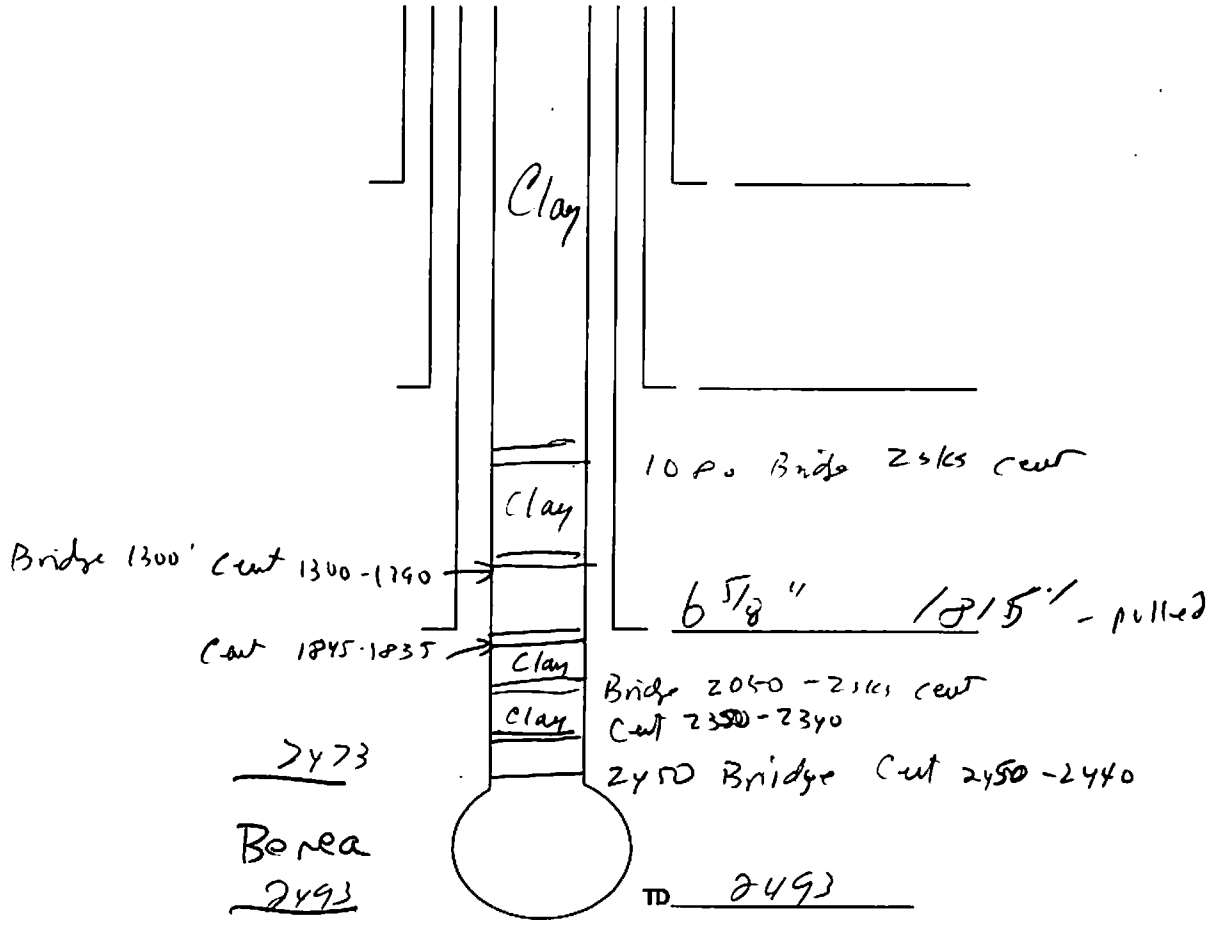
Permit No. Lin. 1044

JAN 1952
WEST VIRGINIA
DEPARTMENT OF MINES

Robert Roule C

Griffithsville Unit #2 Field

47-043- 31044



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

AOR - Well Review Checklist

(96) API Number: 47- 043 - 31046 Area Permit Number: 2R AP

Operator Name: H 6 Energy

Operator's Well #: 7

Farm Name: Robert Bowler

Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐

Well Status: Active ☐ Abandoned ☐ Plugged ☒

TD of well: 2494

Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐

Easting: 416,973 Northing: 4,231,691

Elevation: 298

Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**

Bottom Hole Injection Pressure **0**

Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:

Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-31046

RECORD of Well No. 7 on Bob T. Fowler Farm Acres

Field, District County

Rig Commenced 19, Completed 19

Drilling Commenced Aug 11 1913, Completed Oct 16 1913

Cost per foot, 10 Contractor, Hawley & Hannan Drlg. Co. Address, Hawley, W. Va.

Drillers' Names W. E. McWilliams & John Loudermilk

CONDUCTOR AND CASING USED IN DRILLING

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅝ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 3-16-Inch	4⅞ Inch
15						1810				

CONDUCTOR AND CASING LEFT IN WELL

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅝ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 3-16 Inch	4⅞ Inch
15						1810				

OIL WELL / GAS WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods		Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure
10/20/13	80 qts.									

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Conductor		15	15	El.
Red Rock	15	165	150	
Sand	165	190	25	
Slate	190	230	40	
Sand	230	300	70	
Slate	300	390	90	
Sand	390	420	30	
Coal	420	425	5	425' 10" hole
Sand	425	535	130	
Slate	535	670	115	
Sand	670	760	90	
Slate	760	880	120	
Sand	880	960	80	
Slate	960	1100	140	Hole full of water at 1200'
Salt Sand	1100	1745	645	
Slate	1745	1760	15	
Little Lime	1760	1795	35	
Pencil Cave	1795	1800	5	
Big Lime	1800	1980	180	
Keener	1980	2060	80	
Slate	2060	2140	80	
Lime & Shells	2140	2260	120	
Slate	2260	2453	193	
Brown Shale	2453	2473	20	
Pencil Sand	2473	2494	21	

47-043-31046

47-043-3104C

FORM 03-B

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

LEASE OR PROPERTY OWNER

ADDRESS

G. B. H. Supply Co.
NAME OF WELL OPERATOR

Griffithsville W. Va.
COMPLETE ADDRESS

D Co. 2 19 51
WELL AND LOCATION

Duval District

Lincoln County

Well No. 7

Robert Fowler Farm

STATE INSPECTOR SUPERVISING PLUGGING Dana E. Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

and

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 G. B. H. Supply Co., well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 8th day of Oct., 19 51, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD	FILLING MATERIAL			PLUGS USED	CASING	
FORMATION	CONTENT	FROM	TO	SIZE & KIND	CSG PULLED	CSG LEFT IN
	set bridge	2450'		7	1480	336
	neat cement	2450'	2440'			
	crushed stone	5'		5"	1030	None
	filled with clay	2435'	2350'			
	neat cement	2350'	2340'			
	set bridge	2050'				
	neat cement	2050'	2040'			
	crushed stone	5'				
	filled with clay	2035'	1840'			
	neat cement	1840'	1830'			
	crushed stone	5'				
	set bridge	1300'				
	neat cement	1300'	1290'			
	crushed stone	5'				
	Filled with clay	1285'	1080'			
	neat cement	1080'	1070'			
	set bridge	470'				
	neat cement	470'	350'			
	crushed stone	5'				
	Filled with clay to surface					

COAL SEAMS	DESCRIPTION OF MONUMENT
(NAME)	Erected marker according to rule 18, 1931 regulations
(NAME)	
(NAME)	
(NAME)	

JAN 1952 WEST VIRGINIA DEPARTMENT OF MINES

and that the work of plugging and filling said well was completed on the 20 day of Oct., 19 51.

And further deponents saith not.

Carter Ruby
[illegible]

Sworn to and subscribed before me this 7 day of January, 1952.

[illegible]
Notary Public.

My commission expires: Oct-9-1957

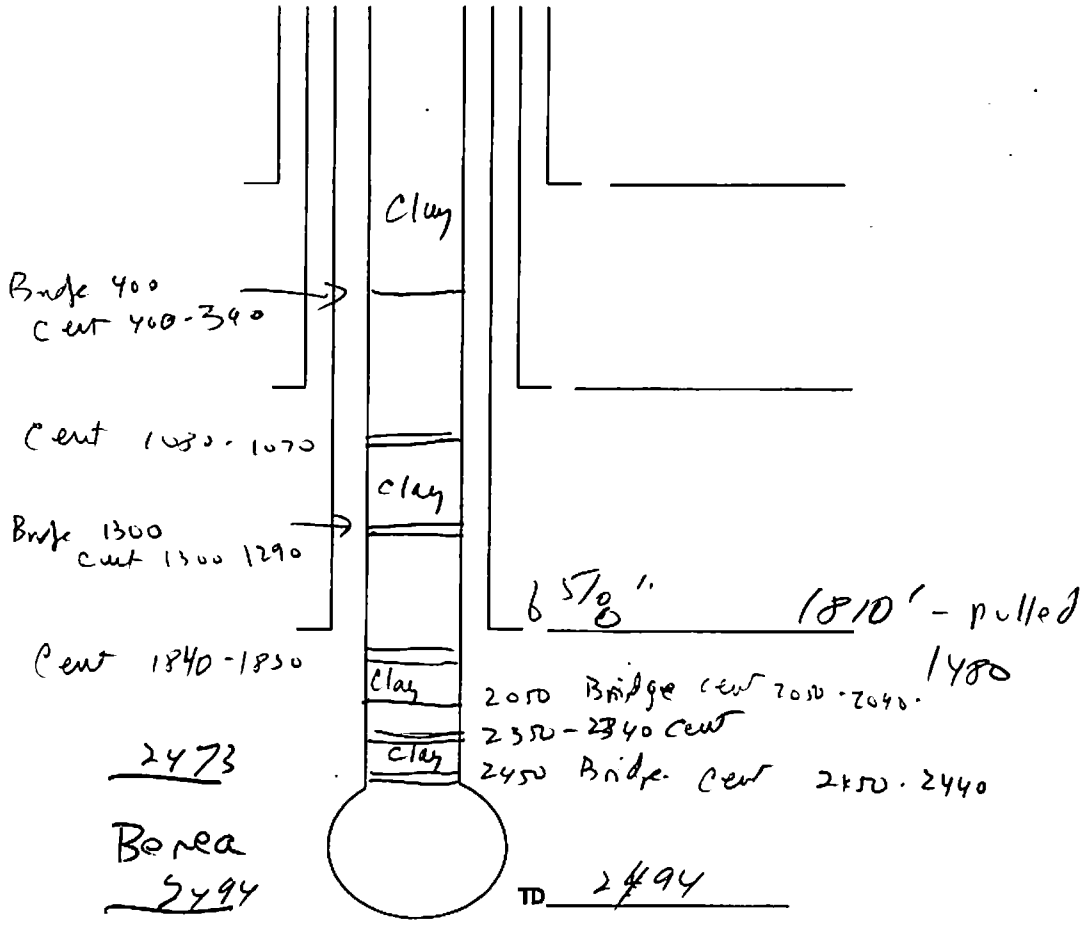
Permit No. Lin-1045

JAN 1952 WEST VIRGINIA DEPARTMENT OF MINES

Robt Fowler 7

Griffithsville Unit #2 Field

47-043- 3104 6



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

97

AOR - Well Review Checklist

API Number: 47- 043 - 31045 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 8
Farm Name: Robert Fowler
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2353
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: Northing:
Elevation:
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-31045

Well No. 8 Robt Fowler Farm Acres
Lease No. Duval District Lincoln County Wyo - State
M.H Jackson Contractor SOUTH PENN DRILLING TOOLS Contractor
Drilling Commenced Nov 14 1917 Drilling Completed Dec 23 1917
N. S. E. W.

ROCK FORMATION	TOP	BOTTOM	STEEL LINE MEASUREMENT	REMARKS
Conductor		16		
Sand	16	150		
Slate	150	270		
Coal	270	274		
Slate	274	340		
Sand	340	475		
Slate	475	515		
Coal	515	518		
Slate	518	525		
Sand	525	635		
Slate	635	695		
Sand	695	730		
Slate	730	835		
Sand	835	865		
Slate	865	980		
Salt Sand	980	1560		
Water hole full	1030			
Slate	1560	1580		
Mason Sand	1580	1600		
Slate	1600	1615		
Little Lime	1615	1645		
Pencil Cave	1645	1650		

CASING RECORD AS TALLIED. NOT STEEL LINE MEASUREMENT

PUT IN WELL SIZE	PUT IN WELL FEET	PUT IN WELL IN.	PULLED OUT FEET	PULLED OUT IN.	LEFT IN WELL FEET	LEFT IN WELL IN.

Shot Date 12/24/17. 80 qts
Amount
Sand.
Result

Packer Size

Depth Set

Production First 24 Hours..... Bbls. Gas Test.....

Approved by..... Superintendent

47-043-31045

Well No. 8 Robt Fowler emp Farm Acres

Lease No. District County State

Contractor Contractor

Drilling Commenced 191 Drilling Completed 191

N. S. E. W.

ROCK FORMATION	TOP	BOTTOM	STEEL LINE MEASUREMENT	REMARKS
Big Lime	1650	1830	1657	
" Injun	1830	1895		
Lime Shells	1895	2050		
Slate	2050	2311		
Brown shale	2311	2334		
Berea Sand	2334	2353	2334	
Oil	2336	2353		
Total depth		2353	2353	

CASING RECORD AS TALLIED. NOT STEEL LINE MEASUREMENT

	PUT IN WELL		PULLED OUT		LEFT IN WELL	
SIZE	FEET	IN.	FEET	IN.	FEET	IN.
8¼	432		432			
6⅝	1670					

Shot Date 12-27-17

Amount 80 Qts

Sand Berea

Result

Packer Size

Depth Set

Production First 24 Hours 5 Bbls. Gas Test

Approved by A P Auchutz Superintendent

47-043-3104S

Form 22-B

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

LEASE OR PROPERTY OWNER

ADDRESS

G. S. H. Supply Co.
NAME OF WELL OPERATOR

Griffithsville, W. Va.
COMPLETE ADDRESS

Dec. 2, 19 51
WELL AND LOCATION

Duval District

Lincoln County

Well No. 8

Robert Fowler Farm

STATE INSPECTOR SUPERVISING PLUGGING Dave E. Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

and

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 G. S. H. Supply Co., well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 22 day of Oct., 19 51 and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD		FILLING MATERIAL			PLUGS USED	CASING	
FORMATION		CONTENT	FROM	TO	SIZE & KIND	CSG PULLED	CSG LEFT IN
		Set bridge	2310'		7"	350	1307
		neat cement	2310	2300'			
		crushed stone	5'		5"	1703	
		filled with clay	2295'	2220'			
		neat cement	2220'	2200'			
		set bridge	1885'				
		neat cement	1895'	1875'			
		crushed stone	5'				
		Filled with clay	1870'	1607'			
		neat cement	1607'	1577'			
		crushed stone	5'				
		set bridge	1180'				
		neat cement	1170'	1170'			
		crushed stone	5'				
		filled with clay	1165'	960'			
		neat cement	960'	950'			
		set bridge	546'				
		neat cement	546'	495'			
COAL SEAMS		filled with clay	495'	301'	DESCRIPTION OF MONUMENT		
(SEAM)		neat cement	301'	250'	Erected marker according to rule		
(SEAM)		crushed stone	5'		18, 1931 regulations		
(SEAM)		filled with clay to surface					
(SEAM)							

and that the work of plugging and filling said well was completed on the 15 day of Nov., 19 51

And further deponents saith not.

Carter Ruby
[illegible]

Sworn to and subscribed before me this 7 day of January, 19 52

J. R. Osborne
Notary Public.

My commission expires: Oct-9-1955

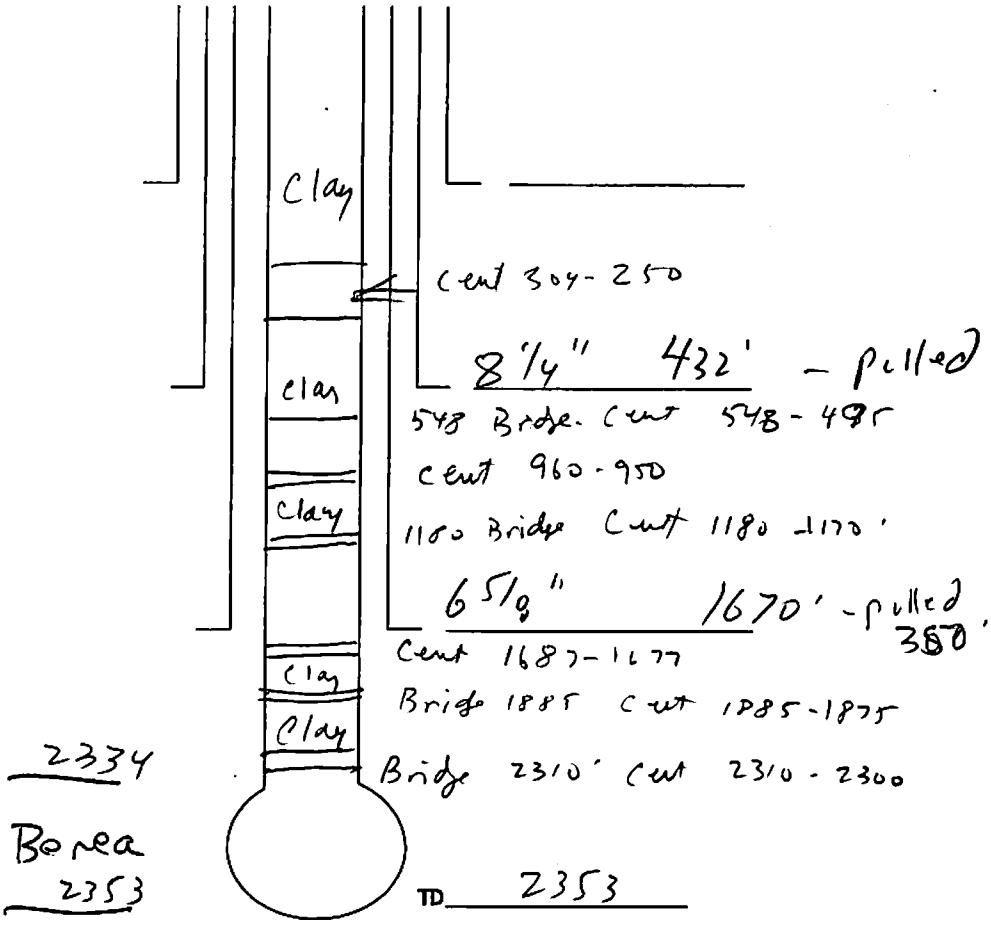
Permit No. Lin-1046

JAN 1952 WEST VIRGINIA DEPARTMENT OF MINES

Robt Rouler 8

Griffithsville Unit #2 Field

47-043- 31045



5" csng

pulled 1703

From Drillers Records/Plugging Records

• WVDEP OOG Internal Use Only
Rev. 6/14/16

98

AOR - Well Review Checklist

API Number: 47- 043 - Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 9
Farm Name: Robert Fowler
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2340
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 416,943 Northing: 4,231,494
Elevation: 262
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☐

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

WR38 NA
Need API

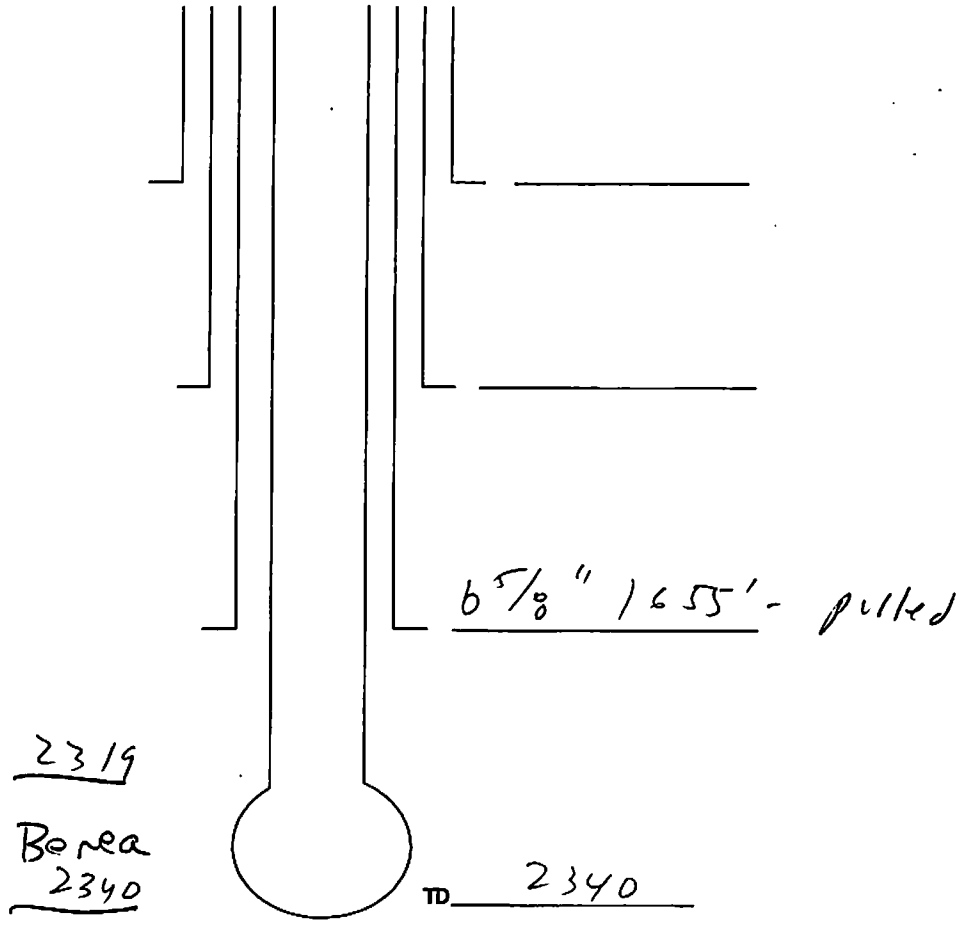
Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

Robt Tanker 9

Griffithsville Unit #2 Field

47-043-



From Drillers Records/Plugging Records

RECORD of Well No. 9 on Robt Fowler Farm Acres

Field, Dunn District Lincoln County Unk.

Rig Commenced 19 , Completed 19

Drilling Commenced Apr 28 1917, Completed May 31st 1917

Cost per foot, 12½ Contractor, Address,

Drillers' Names J. N. Hawes and A. A. Delong

CONDUCTOR AND CASING USED IN DRILLING

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅝ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 3-16-Inch	4⅛ Inch
16						1655				

CONDUCTOR AND CASING LEFT IN WELL

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅝ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 3-16 Inch	4⅛ Inch
16						1655	Casing pulled when abd.			

OIL WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods
6/4/17	80 qts			

GAS WELL

Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Sub soil		16	16	El= 847.2
Slate	16	50	34	
Sand	50	150	100	
Slate	150	300	150	
Coal	300	305	5	
Sand	305	325	20	
Slate	325	350	25	Reduced 10" hole 350'
Sand	350	425	75	
Slate & Shells	425	780	355	
Sand	780	810	30	
Slate	810	980	170	
Salt Sand	980	1620	640	Hole full water 1015'
Little Lime	1620	1645	25	
Pencil Cave	1645	1650	5	
Big Lime	1650	1840	190	
Injun Sand	1840	1905	65	ABANDONED
Slate & Shells	1905	2065	160	
Slate	2065	2300	235	MAY 27 1922
Brown Shale	2300	2319	19	
Bena Sand	2319	2340	21	

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Rev. 6/14/16

(99)

AOR - Well Review Checklist

API Number: 47- 043 - 30467 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 1
Farm Name: Thomas Fowler
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2571
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 416,407 Northing: 4,231,970
Elevation: 323
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-30469

Record of Well No. 1 on Van Fowler Farm Acres

Field. District County.

Rig Commenced 19 Completed 19 ✓

Drilling Commenced Feb 1st 1909 Completed March 23rd 1909

Cost per foot, 1.15 Contractor, Hawley & Hansucker Address, Spencer, W. Va.

Drillers' Names, J. R. Hansucker and J. R. Hansucker

CONDUCTOR AND CASING USED IN DRILLING.

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅝ Inch	6⅝ Inch	6¼ Inch	6 5/16 Inch	4½ Inch
12 1/4						1885			

CONDUCTOR AND CASING LEFT IN WELL.

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅝ Inch	6⅝ Inch	6¼ Inch	6⅛ Inch	6 5/16 Inch	4½ Inch

OIL WELL

GAS WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods		Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure
3/24		2nd Hole 4/26/12		210						

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Soft Slate		13	13	
Sand	13	33	20	
Slate & Shells	33	418	385	
Sand	418	518	100	
Slate	518	643	125	
Sand & Slate	643	1145	502	
Slate	1145	1235	40	
Salt Sand	1235	1830	595	Hole full of water at 1270
Little Sand	1830	1870	40	
Pencil Cave	1870	1875	5	
Big Lime	1875	2060	185	
Injun Sand	2060	2120	60	
Slate	2120	2190	70	
Sand Shell	2190	2290	100	
Slate	2290	2524	234	
Brown Shale	2524	2544	20	
Berea Sand	2544	2568	24	
Slate	2568	2571		

47-043-3046

FORM OG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

South Penn Natural Gas Co.
LEASE OR PROPERTY OWNER

Parkersburg, W. Va.
ADDRESS

C. R. De Lay
NAME OF WELL OPERATOR

P.O. Box 49 Hamlin, W. Va.
COMPLETE ADDRESS

12 August 48 19...
WELL AND LOCATION

Duval District

Lincoln County

One (1)
Well No.

Thomas Fowler Farm

STATE INSPECTOR SUPERVISING PLUGGING D. E. Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

C. R. De Lay and Reynaldo Garcia

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 C. R. De Lay, well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 25 day of July, 1948, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD	FILLING MATERIAL			PLUGS USED	CASING	
FORMATION	CONTENT	FROM	TO	SIZE & KIND	CSG PULLED	CSG LEFT IN
Berea	Red Clay	2524	2424			
	Cement	2424	2414			
Lime & Injun	Red Clay	2150	1900			
	Cement	1900	1890			
	Crushed Ston	1890	1885			
Salt Sand	Red Clay	1885	1660			
	Cement	1660	1650			
Note: Pulled casing in two at 247 ft. could not fish set plug as follows:						
	Red Clay	1650	1215			
	Cement	1215	1205			
	Cement	200	190			
	Red Clay	190	0		247' 8" OD	
COAL SEAMS				DESCRIPTION OF MONUMENT		
(name)				18" x 18" x 30" Concrete Block		
(name)				Date: 9 August 48		
(name)						
(name)						

and that the work of plugging and filling said well was completed on the 9th day of August, 1948.

And further deponents saith not.

C. R. De Lay
Reynaldo Garcia

Sworn to and subscribed before me this 16 day of August, 1948.

J R Oakley
Notary Public.

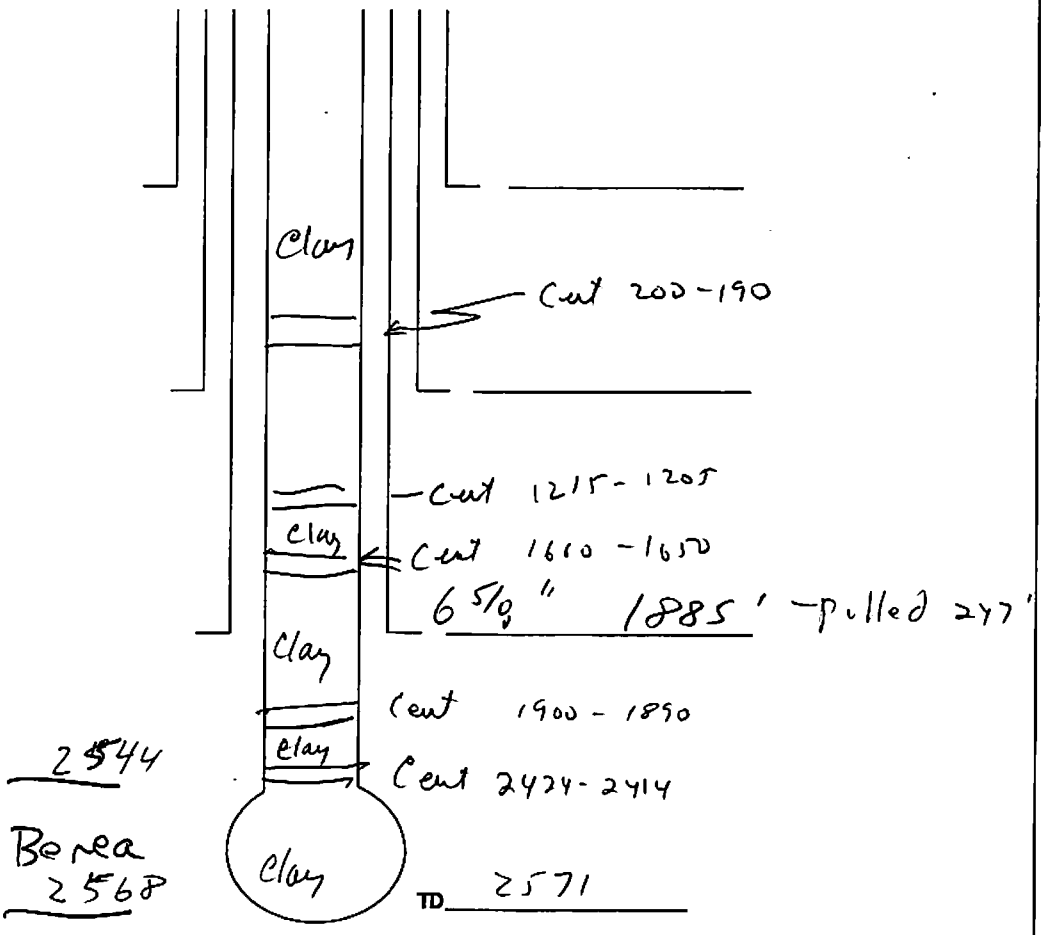
My commission expires: Oct. 7- 1957

Permit No. Lin-467

BM Fowler 1

Griffithsville Unit #2 Field

47-043- 30467



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

100

AOR - Well Review Checklist

API Number: 47- 043 - 30953 Area Permit Number: 2R AP

Operator Name: H 6 Energy

Operator's Well #: 2

Farm Name: Tom Fowler

Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐

Well Status: Active ☐ Abandoned ☐ Plugged ☒

TD of well: 2525

Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐

Easting: 416 456 Northing: 4,231,675

Elevation: 319

Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☐

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = 0

Bottom Hole Injection Pressure 0

Hydrostatic Pressure 0

Comments:

Reviewer Name: Signature:

Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-30953

RECORD of Well No. 2 on The Hartley Farm Acres 200

Field, Devil District Sherman County ✓

Rig Commenced ..... 19 . Completed 19

Drilling Commenced March 22nd 1909. Completed May 17th 1909

Cost per foot. 1½ Contractor, Wheeler Bros. Address, Hartley, W. Va.

Drillers' Names. Ed. Wheeler Jacob Lindamood

CONDUCTOR AND CASING USED IN DRILLING.

Conductor	13 inch	10 inch	8¼ inch	8 inch	7¼ inch	6¼ inch	6¼ inch	6¼ inch	5 3-16 inch	4¼ inch
11-1X						1528				

CONDUCTOR AND CASING LEFT IN WELL.

Conductor	13 inch	10 inch	8¼ inch	8 inch	7¼ inch	6¼ inch	6¼ inch	6¼ inch	5 3-16 inch	4¼ inch
11-11						1528				

OIL WELL **GAS WELL**

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods	Size of Packer	Depth Set	Tubing	1st Bbls. Pressure	Rock Pressure
5th	40	2nd Shot 9/16/13		1400					

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Surface		14	14	
Little Lime	14	39	25	
Slate	39	85	46	
Sand	85	93	8	
Big Lime	93	195	102	
Sand	195	235	40	
Slate & Lime	235	460	225	about 3 ft 1st Coal 1145 ft.
Sand	460	600	140	
Slate	600	650	50	
Sand	650	740	90	
Slate	740	800	60	
Lime	800	825	25	
Slate	825	1100	275	
Lime	1100	1110	10	
Sand	1110	1120	10	
Slate	1120	1125	5	
Slate & Sand	1125	1750	625	Hole full with water 1 ft
Slate	1750	1780	30	1205 ft.
Black Lime	1780	1810	30	
Sand	1810	1815	5	
Big Lime	1815	2010	195	
Lime	2010	2080	70	
Lime & Slate	2080	2250	170	
Little Slate	2250	2486	236	
Big Slate	2486	2505	19	+
Sand	2524	2545	21	+

47-043-30453

FORM OG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

LEASE OR PROPERTY OWNER

ADDRESS

G. S. H. Supply Company
NAME OF WELL OPERATOR
c/o Hallie Pack, Hamlin, West Va.
COMPLETE ADDRESS
January 22 19 51
WELL AND LOCATION
Duval District
Lincoln County
Well No. 2
Thomas Fowler Farm

STATE INSPECTOR SUPERVISING PLUGGING D. E. Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

George Adkins and Paul Maynard 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 Hal Pack, well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 7 day of January, 19 51, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD		FILLING MATERIAL		PLUGS USED	CASING	
FORMATION	CONTENT	FROM	TO	SIZE & KIND	CSG PULLED	CSG LEFT IN
	Bridge Set At	2484'		7"	1400'	428'
	Heat Cement	2484'	2474'			
	Crushed Stone	5'				
	Clay		1858'			
	Heat Cement	1858'	1848'			
	Crushed Stone	5'				
	Bridge Set At	1600'				
	Heat Cement	1600'	1590'			
	Crushed Stone	5'				
	Clay		1105'			
	Heat Cement	1105'	1095'			
	Crushed Stone	5'				
	Bridge Set At	450'				
	Heat Cement	450'	440'			
	Crushed Stone	5'				
COAL SEAMS	Fill with Clay	to Surface		DESCRIPTION OF MONUMENT		
(NAME)				Erected Marker According		
(NAME)				Rule 18, 1931 Regulations		
(NAME)						
(NAME)						

and that the work of plugging and filling said well was completed on the 19 day of January, 19 51.

And further deponents saith not.

George Adkins
Paul Maynard

Sworn to and subscribed before me this 19th day of January, 1951.

F. Lewis
Notary Public.

My commission expires: April 1, 1955

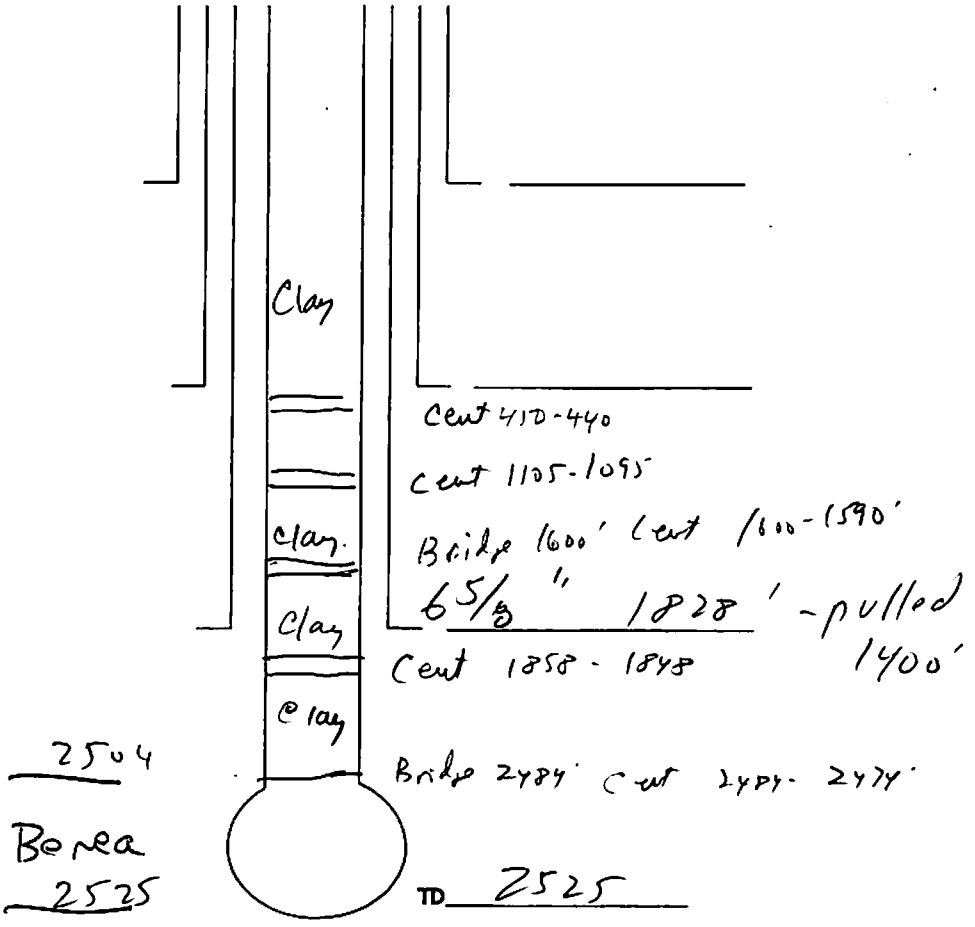
Permit No. LIN-953

FEB 1951 WEST VIRGINIA DEPARTMENT OF MINES

Tom Fowler 2

Griffithsville Unit #2 Field

47-043- 30933



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

101

AOR - Well Review Checklist

API Number: 47- 043 - 30954 Area Permit Number: 2R AP

Operator Name: H 6 Energy

Operator's Well #: ~~29~~ 3

Farm Name: Tom Fowler

Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ~~☒~~ ☐ Producer (NonWaterflood) ☒ Observation ☐ Other ☐

Well Status: Active ☐ Abandoned ☐ Plugged ☒

TD of well: 2480

Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐

Easting: 416,545 Northing: 4,231,949

Elevation: 799

Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☐

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**

Bottom Hole Injection Pressure **0**

Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:

Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043 - 30754

-30954

FORM GG-6

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

LEASE OR PROPERTY OWNER

ADDRESS

G. S. H. Supply Company
NAME OF WELL OPERATOR
c/o Hallie Pack, Hamlin, West Virginia
COMPLETE ADDRESS
February 12 19 51
WELL AND LOCATION
Duval District
Lincoln County
Well No. 3
Thomas Fowler Farm

STATE INSPECTOR SUPERVISING PLUGGING D. E. Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

L. Adkins and Kelly Roberts 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 Hal Pack, well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 10 day of January, 19 51, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD	FILLING MATERIAL			PLUGS USED	CASING	
FORMATION	CONTENT	FROM	TO	SIZE & KIND	CSG PULLED	CSG LEFT IN
	Bridge Set At	2440'		6-5/8"	1775'	None
	Neat Cement	2440'	2430'	2"	2469'	None
	Crushed Stone	5'				
	Clay		1805'			
	Neat Cement	1805'	1795'			
	Crushed Stone	5'				
	Bridge Set At	1600'				
	Neat Cement	1600'	1590'			
	Crushed Stone	5'				
	Clay	1060'				
	Neat Cement	1060'	1050'			
	Crushed Stone	5'				
	Bridge Set At	400'				
	Neat Cement	400'	390'			
	Crushed Stone	5'				
COAL SEAMS	Sealing Fresh Water			DESCRIPTION OF MONUMENT		
(NAME)	Clay to Surface			Erected Marker According		
(NAME)				Rule 18, 1931 Regulations		
(NAME)						

RECEIVED FEB 1951 DEPT. OF MINES CHARLESTON, W. VA.

and that the work of plugging and filling said well was completed on the 20 day of January, 19 51.

And further deponents saith not.

L. Adkins
Kelly Roberts

Sworn to and subscribed before me this 21 day of Feb 19 51.

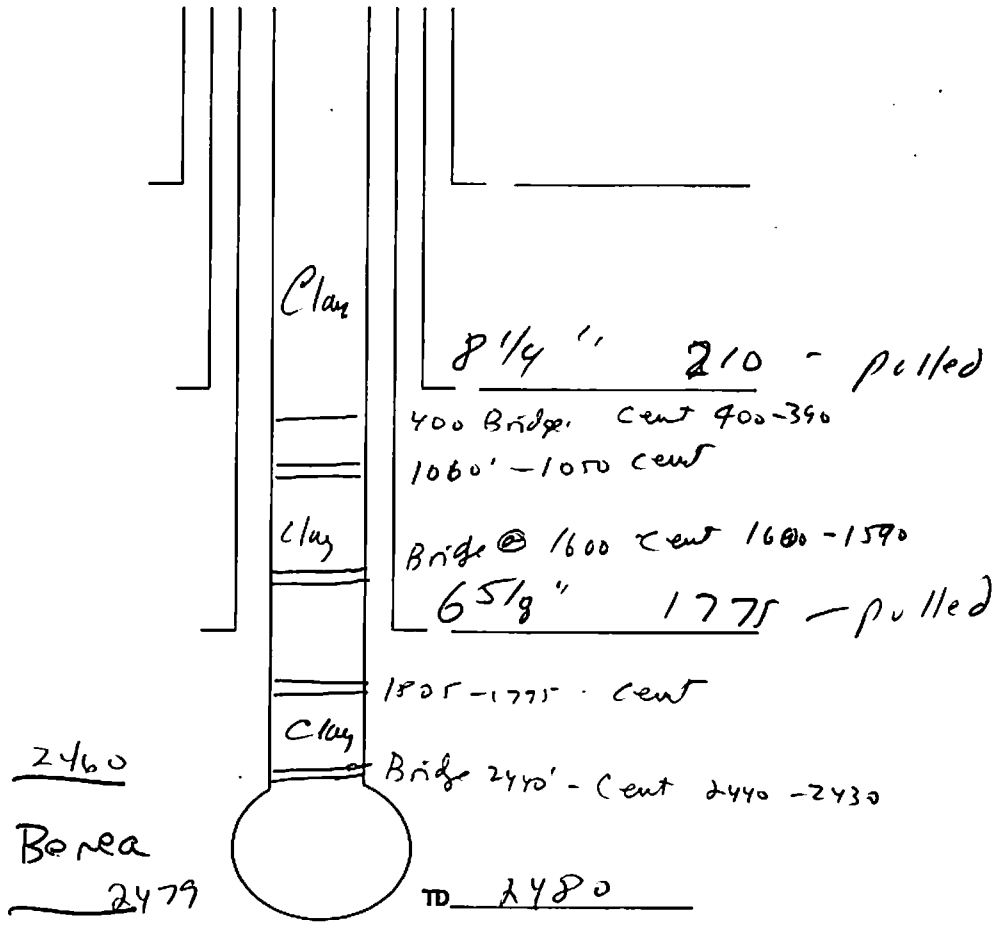
Notary Public.
Permit No. LIN-954

My commission expires:
My Commission Expires March 19, 1953

Thomas Fowler 3

Griffithsville Unit #2 Field

47-043- 30954



From Drillers Records/Plugging Records

ID of Well No. 3 on Tom Fowler Farm Acres Unknown

Ille Field. Duval District Lincoln County. ✓

g Commenced ..... 19..... Completed ..... 19.....

Drilling Commenced April 26th 1909. Completed June 9th 1909

Cost per foot, 1.25 Contractor, Allen & Bros. Address, Yawkey, W.Va.

Drillers' Names, Sam Sybrandt and Jas Donigan

CONDUCTOR AND CASING USED IN DRILLING.

Conductor	18 Inch	10 Inch	8¼ Inch	8 Inch	7¼ Inch	6¼ Inch	6¼ Inch	6¼ Inch	6 Inch	4¼ Inch
13'			210			1775'				

CONDUCTOR AND CASING LEFT IN WELL.

Conductor	18 Inch	10 Inch	8¼ Inch	8 Inch	7¼ Inch	6¼ Inch	6¼ Inch	6¼ Inch	6 Inch	4¼ Inch
13'			—			1775'				

OIL WELL **GAS WELL**

Kind Shot	Size of Torpedo	1st Day's Production	Tubing	Rods		Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure
6/10/09	8 x 7	2nd 360	4½/11	1100						

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
	—	13	13	El. 979.5
Sewage	13	33	20	
Red Rock	33	43	10	Hole filled with water
Shale	43	63	20	at 1165 ft
Sand	63	123	60	
Slate	123	160	37	
Slate Shells	160	180	20	
Red Rock	180	210	30	Well drilled through sand
Sand	210	260	50	by Sam Sybrandt
Slate	260	300	40	June 9th 09
Sand	300	320	20	Shot June 10th by Sybrandt
Slate	320	480	160	torpedo exploded at
Sand	480	500	20	60
Slate	500	550	50	
Sand	550	600	50	
Slate	600	730	130	47-043-30954
Sand	730	780	50	
Black Shale	780	830	50	
Sand	830	860	30	
Slate	860	900	40	
Lime Shells	900	1000	100	
Shale	1000	1080	80	
Lime	1080	1730	650	
Salt Sand	1730	1765	35	
Black Lime	1765	1770	5	
Keener Sand	1770	1850	80	
Big Lime	1850	1925	75	
Injun Sand	1925	2170	245	
Slate & Shells	2170	2440	270	
Shale	2440	2460	20	
Brown Shale	2460	2479	19	
Berea Grit	2480		1	
Bottom Hole				

WVDEP OOG Internal Use Only
Rev. 6/14/16

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AOR - Well Review Checklist

API Number: 47- 043 - 70049 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 4
Farm Name: Tom Fowler
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2431
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 416,696 Northing: 4,231,946
Elevation: 290
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☐

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

WR 38 - NA.

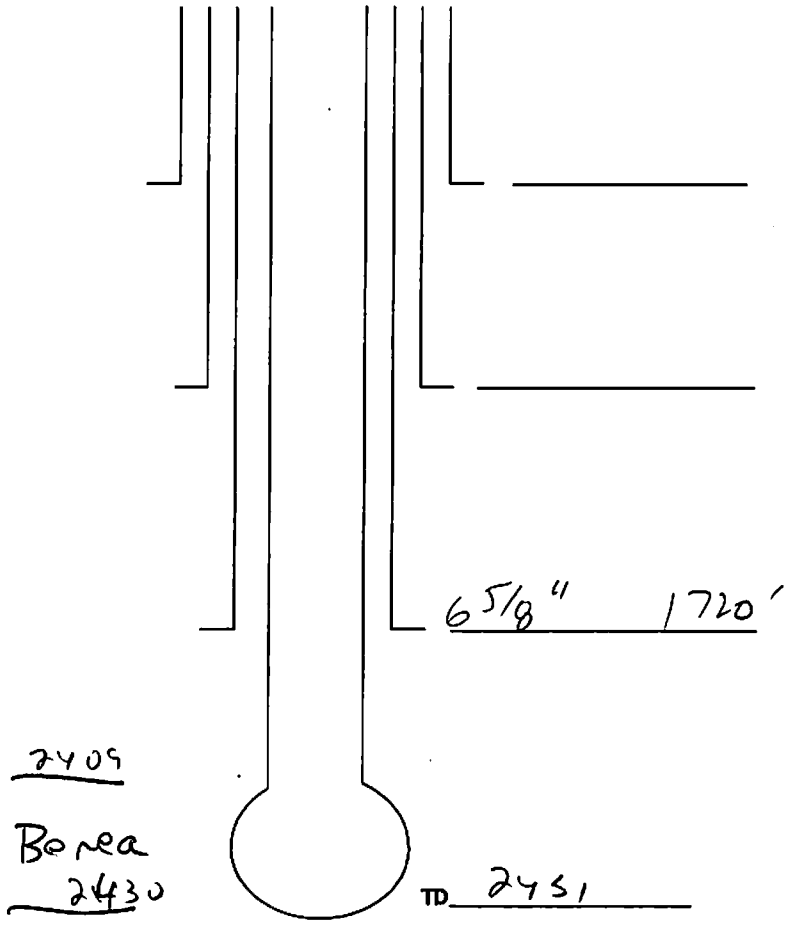
Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

Tom Fowler 4

Griffithsville Unit #2 Field

47-043- 700 49



From Drillers Records/Plugging Records

Lot of Well No. 11 on John Tower Farm Acres Coffman

Fill Field, Dunn District Lincoln County,

Is Commenced 19 Completed 19

Drilling Commenced June 11th 1909. Completed July 27th 1909

Cost per foot, 15 Contractor, Virden Bros Address, Jerseyville

Drillers' Names, Sam Sigrist & Jas Dunn

CONDUCTOR AND CASING USED IN DRILLING.

Conductor	12 inch	10 inch	8¼ inch	8 inch	7¼ inch	6¼ inch	6¼ inch	5¼ inch	5 3-16 inch	4¼ inch
16'						1720				

CONDUCTOR AND CASING LEFT IN WELL.

Conductor	12 inch	10 inch	8¼ inch	8 inch	7¼ inch	6¼ inch	6¼ inch	5¼ inch	5 3-16 inch	4¼ inch
16'						1720				

OIL WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods		Size of Packer	Depth Set	GAS WELL Tubing	1st Rock Pressure	Rock Pressure
7/28/09	40 qts									

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Alluvium		16	16	Bedrock from 10" to 8"
Slate & Sand	16	90	74	Hole cut 2½ Gas
Slate	90	125	35	a little water at 255'
Sand	125	165	40	
Slate	165	200	35	Enough water to drill
Sand	200	260	60	mill at 450' 4 barrels
Red Rock	260	270	30	Gas show at 530'
Sand	270	350	80	
Coal	350	355	5	Slight show Gas 5" blow
Slate	355	380	25	Gas 630 P.M. 7/17 to 3 P.M.
Sand	380	440	60	7/18
Slate	440	460	20	
Sand	460	540	80	water in Salt Sand
Slate	540	570	30	1070' Hole drilled out
Sand	570	670	100	at 1120'
Slate	670	680	10	4' Rock 1480'
Slate	680	690	10	
Slate	690	710	20	
Sand	710	760	50	
Slate	760	820	60	
Sand	820	1000	180	
Slate	1000	1055	55	
Salt Sand	1055	1635	580	
Slate	1635	1675	40	
Black Rock	1675	1710	35	
Sand Rock	1710	1715	5	
Big Rock	1715	1895	180	
Big Lime	1895	1975	80	
Lime & Shale	1975	2389	414	
Lime Shale	2389	2409	20	
Lime Sand	2409	2430	21	
Hot Rock	2430	2431	1	

47043-70049

RECEIVED

JUN 15 1909

WVDEP OOG Internal Use Only
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AOR - Well Review Checklist

API Number: 47- 043 - 30465 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 5
Farm Name: Tom Fowler
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2495
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 416,825 Northing: 4,232,000
Elevation: 306
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-30463

Record of Well No. 5 on Hall Tract Farm ... Acres ... ✓

... Field, ... District ... County, ...

Commenced ... 19 ... Completed ... 19 ...

Drilling Commenced Oct 1 1909. Completed 1st 1/2 of Nov 1909 19 12/6/09

Cost per foot. 1.10 Contractor, Wheeler Bros. Address, ... Fly.

Drillers' Names, Jas. Fleming Jas. Lemley

CONDUCTOR AND CASING USED IN DRILLING.

Conductor	13 inch	10 inch	8¼ inch	8 inch	7⅝ inch	6¼ inch	6⅛ inch	5¾ inch	5 inch	4½ inch
21										

CONDUCTOR AND CASING LEFT IN WELL.

Conductor	13 inch	10 inch	8¼ inch	8 inch	7⅝ inch	6¼ inch	6⅛ inch	5¾ inch	5 inch	4½ inch

OIL WELL **GAS WELL**

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods		Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure
4/21/10	40 qts.	2 mcf	Shot Tube	2409 ft.		8"				

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Surface		21	21	
Pittsburg	21	81	60	
Light Sand	81	200	119	
Sand	200	340	140	
Slate	340	380	40	Reamed 10" hole 350'
Sand	380	395	15	
Coal	395	403	8	
Sand	403	650	247	Gas
Salt Shells	650	750	100	
Gray Sand	750	800	50	
Slate & Shells	800	940	140	
Slate	940	1000	60	
Lime	1000	1050	50	Shot 4 qts. at 920 - Hook }
Slate	1050	1075	25	Shot 4 qts. " 21 - " }
Lime	1075	1090	15	
Slate	1090	1105	15	
Salt Sand	1105			got Gas at top of Salt Sand
Hole Started		1136	3/16/10	O.H. 26 reamed to 10"
Top Salt Sand	1105	1760	655	well to have gas per block
Maxton Lime	1760	1795	35	Oct 27
Price Lime	1795	1797	2	total depth at pump 1136'
Big Lime	1797	1975	178	
Injun Sand	1975	2045	70	Hole filled up from
Berea Shale	2045	2447	402	Salt Sand 1180 ft.
Berea Shale	2447	2470	23	
Berea Sand	2470	2492	22	
O.H.	2492	2495	3	
Completed		—	4/20/1910	

47-043-30465

FORM OG-5

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

South Penn Natural Gas Co.
LEASE OR PROPERTY OWNER

Parkersburg, W. Va.
ADDRESS

C. R. De Lay
NAME OF WELL OPERATOR

P. O. Box 49 Hamlin, W. Va.
COMPLETE ADDRESS

24 July 19 48
WELL AND LOCATION

Duval District

Lincoln County

Well No. Five

Thomas Fowler Farm

STATE INSPECTOR SUPERVISING PLUGGING D. E. Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

C. R. De Lay and Guadalupe Saenz

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 C. R. De Lay, well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 17th day of July, 19 48, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD		FILLING MATERIAL		PLUGS USED	CASING	
FORMATION	CONTENT	FROM	TO	SIZE & KIND	CSG PULLED	CSG LEFT IN
Berea	Red Clay	2450	2350			
	Cement	2350	2340			
Big Injun	Red Clay	2075	1820			
Big Lime	Cement	1820	1810			
Salt Sand	Red Clay	1810	1085			
Little Lime	Cement	1085	1075			
	Cement	200	190			
	Red Clay	190	0		1805'	7" O.D.
					1829'	5 1/2"
COAL SEAMS				DESCRIPTION OF MONUMENT		
(NAME)				23 July '48		
(NAME)						
(NAME)						
(NAME)						

and that the work of plugging and filling said well was completed on the 23rd day of July, 1948

And further deponents saith not.

C. R. De Lay

Guadalupe Saenz

Sworn to and subscribed before me this 27 day of July, 1948

E. J. Hall

Notary Public.

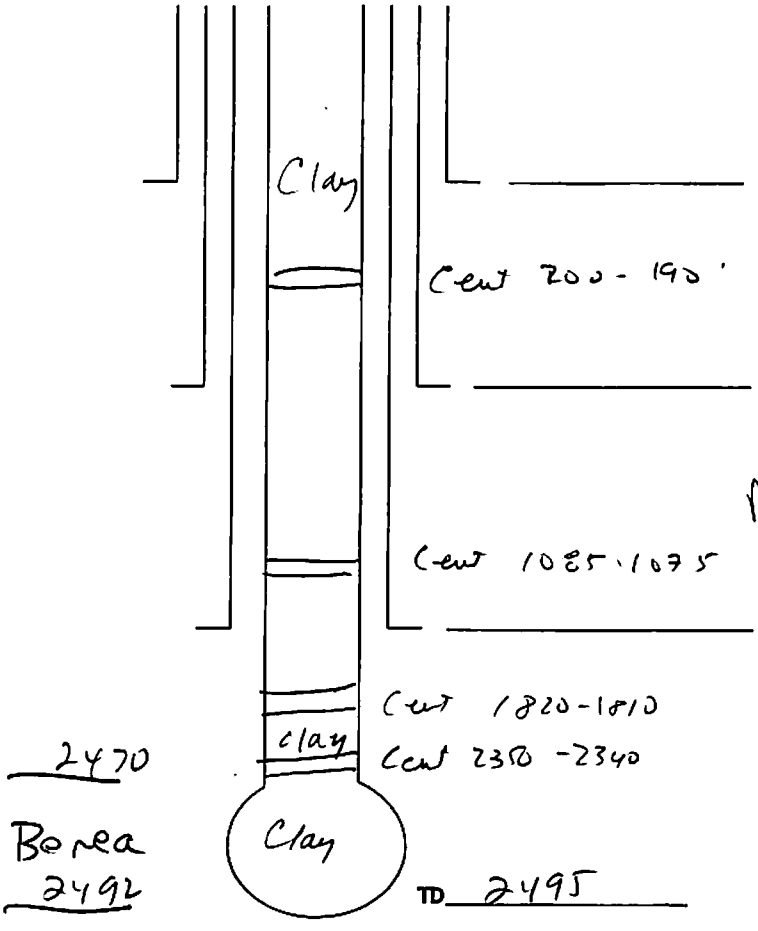
My commission expires: 3-20-49

Permit No. Lin-465

Tom Fowler 5

Griffithsville Unit #2 Field

47-043- 30465



NO COAL RECORD

Pulled 1801' 6 5/8"
1829' 5 3/16"

From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

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AOR - Well Review Checklist

API Number: 47- 043 - 0 2235 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 6
Farm Name: Tom Bowler
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2493
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 416,924 Northing: 4,231,870
Elevation: 306
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-02235

RECORD of Well No. 6 on Mrs. Parker Farm ..... Acres .....

..... Field, ... District ..... County.

Rig Commenced ..... 19 .. Completed 19

Drilling Commenced Aug. 27 1910 .. Completed June 16 1911

Cost per foot, 1½ Contractor, Smith & Lemmon Fuel Co. Address, Clarksburg, W. Va.

Drillers' Names, Access & Lewis and C. G. Lemmon

CONDUCTOR AND CASING USED IN DRILLING.

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7¼ Inch	6¼ Inch	6¼ Inch	5¼ Inch	5 3/16 Inch	4¼ Inch
16						1755				

CONDUCTOR AND CASING LEFT IN WELL.

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7¼ Inch	6¼ Inch	6¼ Inch	5¼ Inch	5 3/16 Inch	4¼ Inch
16						1718				

OIL WELL — GAS WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods		Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure
6/16/10	90 qts.									

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
No 1 Gravel		16	16	
Big Dark	16	76	60	
Sand	76	96	20	
Slate	96	136	40	
Coal	136	140	4	
Sand	140	160	20	
Slate	160	360	200	
Sand	360	410	50	420' of 10" Hole
Coal	410	415	5	
Slate & Shell	415	1090	675	
Slate	1090	1130	40	
Little Sand	1130	1690	560	Hole full of Salt water at 1180
Slate	1690	1710	20	
Lime	1710	1730	20	
Slate	1730	1740	10	
Little Lime	1740	1775	35	
Pencil Cave	1775	1780	5	
Big Lime	1780	1960	180	
Little Red	1960	1975	15	
Big Injun	1975	2040	65	
Slate	2040	2100	60	
Coffee Shale	2100	2260	160	
Sand	2260	2453	193	
Coffee Shale	2453	2473	20	
Berea Sand	2473	2493	20	

WR-38
26-May-99

API # 47-43-02235-P

STATE OF WEST VIRGINIA
DIVISION OF ENVIRONMENTAL PROTECTION
SECTION 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: Bell, Carl L Operator Well No.: T Fowler # 6
LOCATION: Elevation: 998.00 Quadrangle: Griffithsville
District: Duval County: Lincoln
Latitude: 6950 Feet South of 38 Deg. 15 Min. 0 Sec.
Longitude 9325 Feet West of 81 Deg. 55 Min. 0 Sec.

RECEIVED
Office of Oil & Gas
Permitting
SEP 07 1999
WV Division of
Environmental Protection

Well Type: OIL X GAS ____

Company: S. L. Meadows, Jr. Production, Inc.
ROUTE 2 BOX 22
RAVENSWOOD, WV 26164
Coal Operator or owner N/A

Agent: S. L. Meadows, Jr.
Coal Operator or owner N/A

Permit Issued:
STATE OF WEST VIRGINIA,
County of ____

AFFIDAVIT

ss:

Jason Meadows and William Ferrebee 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 Rod Dillon Oil and Gas Inspector representing the Director, say that said work was commenced on the 16 day of August, 1999, and that the well was plugged and filled in the following manner:

TYPE	FROM	TO	PIPE REMOVED		LEFT
Gel	2450	2150	2 3/16 tubing	2483	-0-
Cement	2150	1900			
Gel	1900	1800	5 ½ Csg	440	-0-
Cement	1800	1700			
Gel	1700	1100	7 Csg	-0-	1785
Cement	1100	1000	Shot 7 Csg @	1100	
Gel	1000	850		805	
Cement	850	750		612	
Gel	750	650	298 squeeze cement		
Cement	650	550	To surface		
Gel	550	350			
Cement	350	250			
Gel	250	100			
Cement	100	-0-			

9/8/99

Description of monument: 23 ft long 7 Csg w/5 ft above ground and that the work of plugging and filling said well was completed on the 2 day of September, 1999.

And further deponents saith not.

Sworn and subscribe before me this 7 day of September, 1999
My commission expires: December 24, 2007

Zelma M Meadows
Notary Public

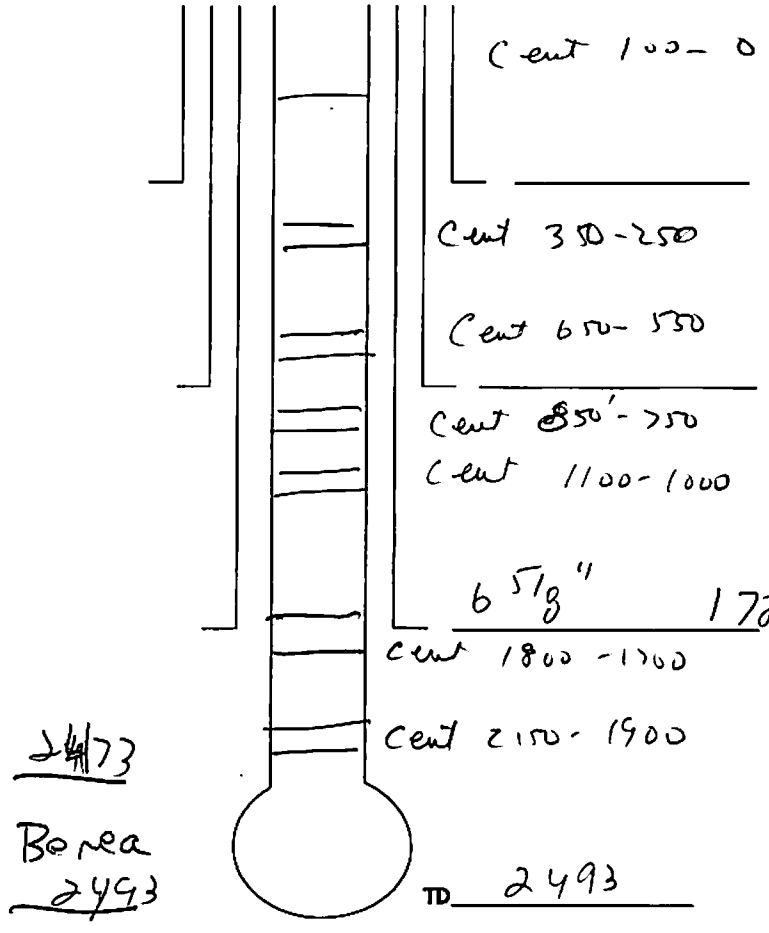
Official Seal
Notary Public, State of West Virginia
Zelma M. Meadows
Route 2, Box 22
Ravenswood, WV 26164
My commission expires December 24, 2007

Oil and Gas Inspector

TDw Fowler b

Griffithsville Unit #2 Field

47-043- 02235



2/4/73

Berea 2493

Unable to pull 6 5/8" Perforated Casing

From Drillers Records/Plugging Records

W DEP OOG Internal Use Only
Rev. 6/14/16

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AOR - Well Review Checklist

API Number: 47- 043 - 31046 - ? Area Permit Number: 2R AP

Operator Name: H 6 Energy

Operator's Well #: 7

Farm Name: TOM Boulter

Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐

Well Status: Active ☐ Abandoned ☐ Plugged ☒

TD of well: 2409

Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐

Easting: 416,589 Northing: 4,231,773

Elevation: 286

Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☐

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = 0

Bottom Hole Injection Pressure 0

Hydrostatic Pressure 0

Comments:

WR 38 NA

Reviewer Name: _____ Signature: _____

Date Reviewed: _____

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

Record of Well No. 7 on Thomas Fowler Farm Acres

Field, District County,

Rig Commenced 19 , Completed 19

Drilling Commenced July 19 1911 Completed Aug 29 1911

Cost per foot, 1½ Contractor Yaukey & Engman Drl Address, Yaukey W.Va.

Drillers' Names, D. M. Rodgers & G. H. Lewis

CONDUCTOR AND CASING USED IN DRILLING.

Conductor	13 inch	10 inch	8¼ inch	8 inch	7⅛ inch	6¼ inch	6¼ inch	5⅝ inch	5 3-16 inch	4¼ inch
14						1715'				

CONDUCTOR AND CASING LEFT IN WELL.

Conductor	13 inch	10 inch	8¼ inch	8 inch	7⅛ inch	6¼ inch	6¼ inch	5⅝ inch	5 3-16 inch	4¼ inch
14						none ~~1715~~				

OIL WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods
8/31/11	90 qts.			

GAS WELL

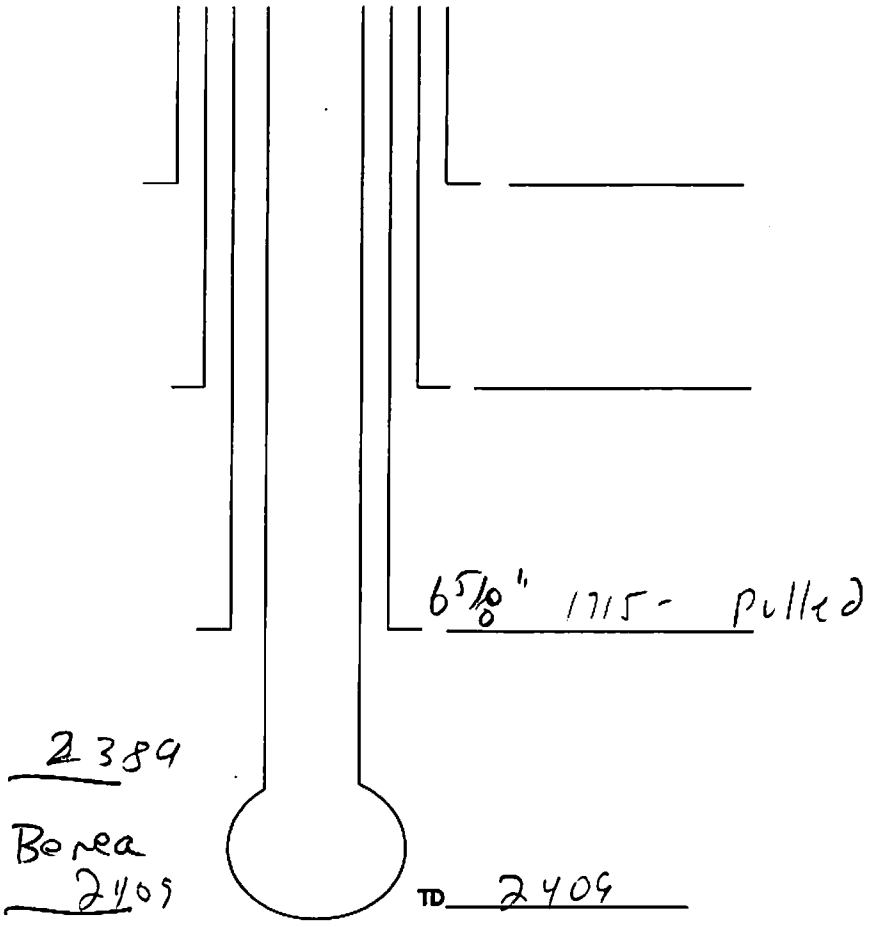
Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Soil & Clay		14	14	Cased 15' in Big Lime
Slate	14	54	40	
Sand	54	74	20	Elev. 915.5'
Slate	74	154	80	
Sand	154	214	60	
Slate	214	324	110	
Sand	324	400	76	410' of 10" hole
Coal	400	404	4	
Slate	404	424	20	
Sand & Slate	424	1040	616	
Slate	1040	1080	40	
Salt Sand	1080	1620	540	
Slate	1620	1640	20	
Red Rock	1640	1650	10	Hole full of Water at 1120'
Slate	1650	1660	10	
Little Lime	1660	1695	35	
Pencil Cave	1695	1700	5	
Big Lime	1700	1890	190	ABANDONED
Big Injun	1890	1960	70	
Slate	1960	2020	60	MAY 12 1929
Gray Shells	2020	2140	120	
Slate	2140	2369	229	
Brown Shale	2369	2389	20	
Berea Sand	2389	2409	20	

Tom Fuller 7

Griffithsville Unit #2 Field

47-043- 31046



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
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AOR - Well Review Checklist

API Number: 47- 043 - 31045 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 8
Farm Name: Tom Fowler
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2373
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 416,619 Northing: 4,231,618
Elevation: 264
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☐

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

WR 38 NA

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

RECORD of Well No. 8 on Otto Fowler Farm Acres

Field, District County

Rig Commenced 19 , Completed 19

Drilling Commenced Nov 2 1911, Completed Dec 14 1911

Cost per foot, 11⅝ Contractor, Hawley & Timmons Oil Co. Address, Hawley Mich

Drillers' Names Dell Bostian & E. H. Lovell

CONDUCTOR AND CASING USED IN DRILLING

Conductor	13 Inch	10 Inch	8⅛ Inch	8 Inch	7⅝ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 3-16-Inch	4½ Inch
15'						1680				

CONDUCTOR AND CASING LEFT IN WELL

Conductor	13 Inch	10 Inch	8⅛ Inch	8 Inch	7⅝ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 3-16 Inch	4½ Inch
15'						1680				

OIL WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods
12/15/11	80 qts.			

GAS WELL

Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressu

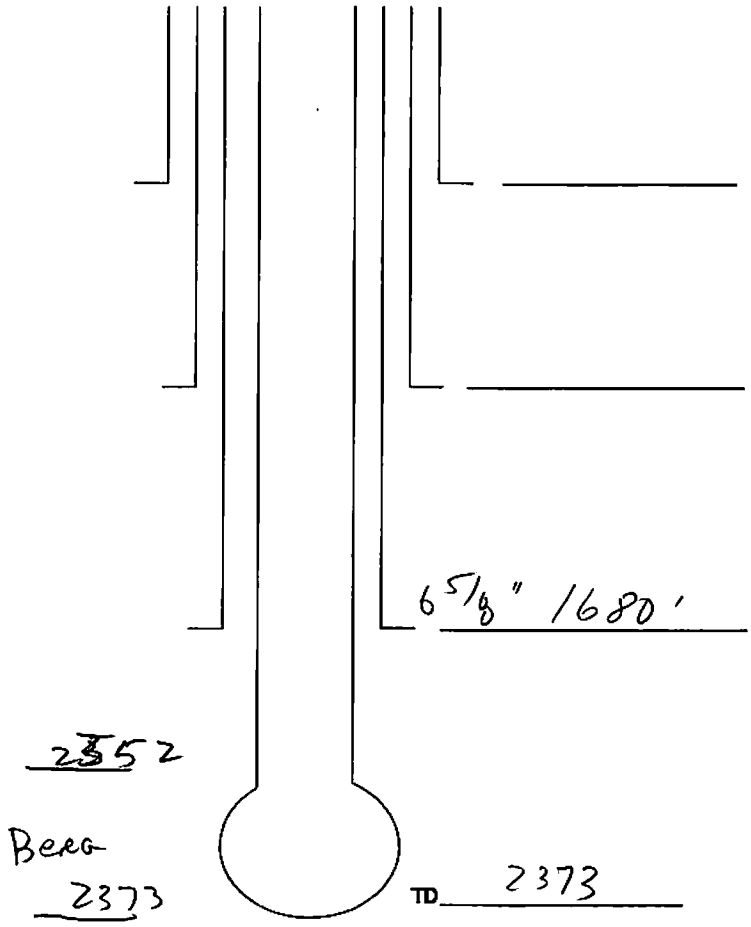
FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Soil & Clay		15	15	Struck oil in Big Lime
Sand	15	35	20	El=872
Slate & Shells	35	160	125	
White	160	220	60	
Slate	220	280	60	
Sand	280	300	20	
Coal	300	305	5	360' 10" hole
Slate	305	335	30	
Sand	335	355	20	
Coal	355	358	3	
Sand	358	398	40	
Slate & Sand	398	950	552	
Slate	950	990	40	
Soft Sand	990	1585	595	Hole full of Water at 1070
Coal	1585	1595	10	
Slate & Lime	1595	1620	25	
Slate	1620	1630	10	
White Lime	1630	1665	35	
Black Lime	1665	1669	4	
Big Lime	1669	1849	180	
Dk Lime	1849	1919	70	
Slate	1919	1989	70	
Lime Shells	1989	2139	150	
Slate	2139	2332	193	
Dimm Lime	2332	2352	20	
[illegible]	[illegible]	[illegible]	[illegible]	

BRANCHED
JUL 3 1923

Tom Fowler 8

Griffithsville Unit #2 Field

47-043- 31045



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
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(107)

AOR - Well Review Checklist

API Number: 47- 043 - Area Permit Number: 2R AP

Operator Name: H 6 Energy

Operator's Well #: 9

Farm Name: TOM Fowler

Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐

Well Status: Active ☐ Abandoned ☐ Plugged ☒

TD of well: 2318

Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐

Easting: 416,730 Northing: 4,231,562

Elevation: 256

Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☐

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = 0

Bottom Hole Injection Pressure 0

Hydrostatic Pressure 0

Comments:

WR38 - NA

Reviewer Name: Signature:

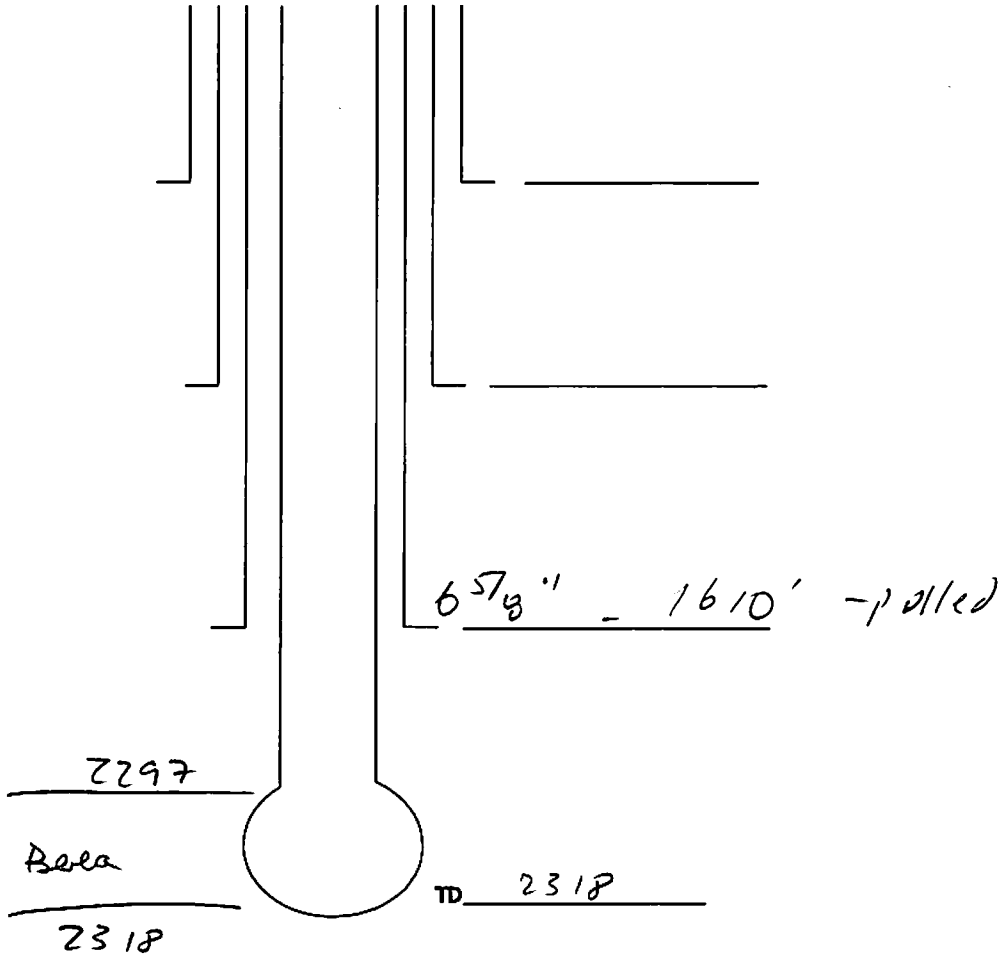
Date Reviewed:

** Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

Tom Fowler 9

Griffithsville Unit #2 Field

47-043-



From Drillers Records/Plugging Records

RECORD of Well No. 9 on Thos Fowler Farm Acres

Field, District County

Rig Commenced 19 , Completed 19

Drilling Commenced Feb 21 1912, Completed Mch 28 1912

Cost per foot, 1.15 Contractor Yaukey & Gumm Dr Address, Yaukey, W. Va.

Drillers' Names Stillwagon & Lovell

CONDUCTOR AND CASING USED IN DRILLING

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅝ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 3-16 Inch	4⅜ Inch
						1610				

CONDUCTOR AND CASING LEFT IN WELL

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅝ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 3-16 Inch	4⅜ Inch
		9				1610 Pulled when abandoned				

OIL WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods
3/20/12	80 qt.			

GAS WELL

Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Soil		9		El = 829.68
Lyme	9	19	10	
Slate	19	79	60	380' 10" Hole.
Lime	79	99	20	
Slate	99	199	100	
Lime	199	225	26	Big Water 1020'
Slate	225	300	75	
Sand	300	315	15	
Slate	315	350	35	Shot 11/6/10 - 90 qts - Berea.
Sand	350	377	27	
Coal	377	380	3	
Lyme	380	390	10	
Slate	390	490	100	
Sand	490	565	75	
Slate	565	715	150	
Sand	715	800	85	
Slate	800	850	30	
Sand	850	895	45	
Slate	895	950	55	
Salt Sand	950	1520	570	
Break	1520	1565	45	
Slate Lime	1565	1600	35	
Pencil Cave	1600	1605	5	
Big Lime	1605	1790	185	
Big Injun	1790	1865	75	
Slate	1865	1915	50	
Injun	1915	1995	80	
Slate & Shells	1995	2045	50	
Slate	2045	2297	252	
Berea Sand	2297	2318	21	

ABANDONED

APR 29 1922

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AOR - Well Review Checklist

108

API Number: 47- 043 - 02236 Area Permit Number: 2R AP

Operator Name: H 6 Energy

Operator's Well #: 10

Farm Name: Tom Fowler

Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐

Well Status: Active ☐ Abandoned ☐ Plugged ☒

TD of well: 2450

Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐

Easting: 416,837 Northing: 14,231,636

Elevation: 291

Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐	
Date of Last MIT:	Passed?	No ☐	Yes ☐	
Open Hole Completion		No ☐	Yes ☒	
Well penetrates injection zone?		No ☐	Yes ☒	
Well perforated in injection zone?		No ☒	Yes ☐	
Cemented across injection zone?		No ☒	Yes ☐	
Packer immediately above injection zone (<100')?		No ☐	Yes ☐	No Packer ☐
		If No: Provide Depth:		
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒	

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**

Bottom Hole Injection Pressure **0**

Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:

Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-02236

RECORD of Well No. 10 on Wm. Fowler Farm Acres

Field, District 18 County

Rig Commenced 19 Completed 19

Drilling Commenced June 5 1913 Completed July 19 1913

Cost per foot, 1.15 Contractor, Gawsey & Brumfield Address, Gawsey &

Drillers' Names, M.E. Williams & E.E. Hoffman

CONDUCTOR AND CASING USED IN DRILLING

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅝ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 3-16-Inch	4
9				400		1750				

CONDUCTOR AND CASING LEFT IN WELL

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅝ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 3-16 Inch	4
9						1750				

OIL WELL — GAS WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods		Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock
7/31/13	80 qts.	2nd Shot	9/16	110 qts.						

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Conductor		9	9	El = 959.64
Slate	9	120	111	
Sand	120	200	80	
Slate	200	225	25	
Sand	225	275	50	
Slate	275	300	25	
Sand	300	375	75	
Coal	375	380	5	
Slate	380	475	95	
Sand	475	500	25	
Slate	500	525	25	
Sand	525	560	35	
Slate	560	800	240	
Sand	800	890	90	
Slate	890	1060	170	Hole full of Water 113
Salt Sand	1060	1700	640	
Little Lime	1700	1735	35	
Pencil Cave	1735	1740	5	
Big Lime	1740	1920	180	
Big Injun	1920	1990	70	
Slate	1990	2080	90	
Sage Shells	2080	2180	100	
Slate	2180	2410	230	
Brown Shale	2410	2430	20	
Berea Sand	2430	2450	20	

API# 47-043-2236

WWR-38

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY
DIVISION 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: Thomas Fowler
LOCATION: Elevation: 971'
District: Duval
Latitude: _____
Longitude: _____

Operator Well No.: No. 10
Quadrangle: Griffithsville 7.5'
County: Lincoln
Deg. ____ Min. ____ Sec. ____
Deg. ____ Min. ____ Sec. ____

Well Type: Oil X Gas ____ WIW ____

Company: East Resources Inc.
P.O. Box 5519
Vienna, WV 26105
Agent: Philip S. Ondrusek
Inspector: Ralph Triplett
Permit Issued: 7/24/2008'

Coal Operator or Owner: NA

Coal Operator or Owner: NA

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Wood ss:
Mark Miller and Paul Stevens 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 East Resources Inc., well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 1st day of September, 2009, and that the well was plugged and filled in the following manner:

TYPE	FROM	TO	PIPE REMOVED	LEFT
Cement	2420'	2310'	6 5/8" 0'	1750'
Cement	1920'	1700'		
Cement	1055'	950'		
Cement	560'	450'		
Cement	410'	300'		
Cement	128'	0		
		Perforated 6 5/8" Casing - 3 Shots; 1022' - 998'; 502' - 498'; 380' - 375' & 102' - 98'.		
6% Gel Between Cement Plugs				

Description of monument: 7" at serface
and that the work of plugging and filling said well was completed on the 11th day of September 2009'
And further deponents saith not.

Mark Miller
Paul McClamrock

Sworn and subscribe before me this 1st day of October, 2009

Notary Public

My commission expires: Oct. 4, 2016

OFFICIAL SEAL
NOTARY PUBLIC
STATE OF WEST VIRGINIA
S. DIANNE DULANEY
P. O. Box 5519
Vienna, West Virginia 26105
My Commission Expires Oct. 4, 2016

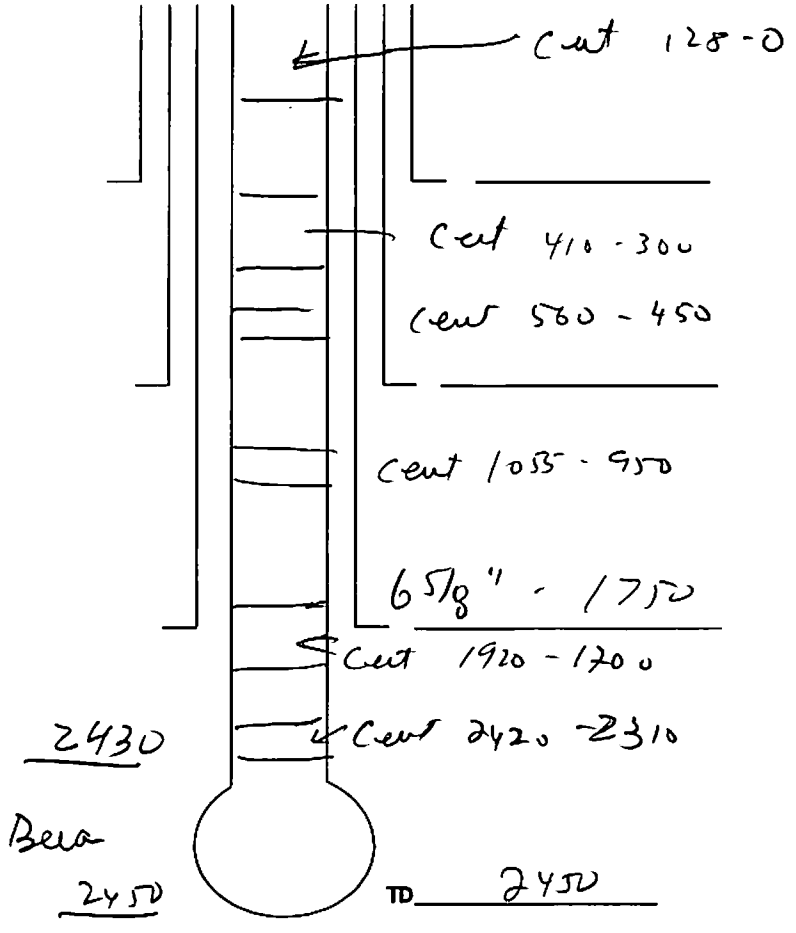
Affidavit reviewed by the Office of Oil and Gas:

Ralph D. Triplett
Title: District Inspector

TOM Roulette 10

Griffithsville Unit #2 Field

47-043- 02236



Unable to pull 6 5/8" Csg

Unable to pull 6 5/8" Csg

From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

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AOR - Well Review Checklist

API Number: 47- 043 - 30474 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 11
Farm Name: Tom Towle
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2379
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 416,779 Northing: 4,231,796
Elevation: 271
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐	
Date of Last MIT:	Passed?	No ☐	Yes ☐	
Open Hole Completion		No ☐	Yes ☒	
Well penetrates injection zone?		No ☐	Yes ☒	
Well perforated in injection zone?		No ☒	Yes ☐	
Cemented across injection zone?		No ☒	Yes ☐	
Packer immediately above injection zone (<100')?		No ☐	Yes ☐	No Packer ☐
		If No: Provide Depth:		
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒	

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

Mary Hamilton

RECORD of Well No. 11 on Thos. Fowler Farm Acres

Field, District County

Rig Commenced 19 , Completed 19

Drilling Commenced Feb 12 1917 Completed April 17 1917

Cost per foot, 1.25 Contractor, Boone Drilling Co Address, Spencer W. Va.

Drillers' Names J. N. Haines and A. A. Delong

CONDUCTOR AND CASING USED IN DRILLING

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅝ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 3-16-Inch	4⅜ Inch
12						1685'				

CONDUCTOR AND CASING LEFT IN WELL

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅝ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 3-16 Inch	4⅜ Inch
12						1685'				

OIL WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods
4/20/17	80 qts			

GAS WELL

Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Conductor		12	12	El = 887
Slate	12	28	16	
Sand	28	35	7	
Slate	35	60	25	
Sand	60	100	40	Reduced hole from 10 to 8"
Slate	100	175	75	at 350'
Sand	175	288	113	
Slate	288	300	12	
Coal	300	305	5	
Slate	305	350	45	
Sand	350	410	60	
Slate	410	425	15	
Sand	425	510	85	Hole full Salt Water 1015'
Slate	510	610	100	
Sand	610	650	40	
Slate	650	790	140	
Sand	790	840	50	
Slate	840	880	40	
Sand	880	955	75	
Slate	955	975	20	
Salt Sand	975	1645	670	
Little Lime	1645	1680	35	
Pencil Cave	1680	1685	5	
Big Lime	1685	1865	180	
Big Injun	1865	1930	65	
Slate	1930	2010	80	
Shells	2010	2160	150	
Slate	2160	2340	180	
Brown Shale	2340	2360	20	
Berea Grit	2360	2379	19	

47-043-3047-4

FORM OG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

47-043-30474

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

South Penn Natural Gas Co.
LEASE OR PROPERTY OWNER

Parkersburg, W. Va.
ADDRESS

C. R. De Lay
NAME OF WELL OPERATOR

P.O.Box 49 Hamlin, W. Va.
COMPLETE ADDRESS

16 August 1948

WELL AND LOCATION

Duval District

Lincoln County

Well No. Eleven (11)

Thomas Fowler Farm

STATE INSPECTOR SUPERVISING PLUGGING D. E. Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

C. R. De Lay and Reynaldo Garcia 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 C. R. De Lay, well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 12 day of August, 1948, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD FORMATION	FILLING MATERIAL CONTENT	FROM	TO	PLUGS USED SIZE & KIND	CASING CSG PULLED	CASING CSG LEFT IN
Berea	Red Clay	2430	2330			
	Cement	2330	2320			
Lime & Injun	Red Clay	1960	1700			
	Cement	1700	1690			
Salt Sand	Red Clay	1690	955			
	Cement	955	945			
	Cement	200	190			1685 Ft. 7" OD
	Red Clay	190	0			

COAL SEAMS
(NAME)
(NAME)
(NAME)
(NAME)

DESCRIPTION OF MONUMENT
18" x 18" x 30" Concrete Block
Date: 15 August 48

and that the work of plugging and filling said well was completed on the 15 day of August, 1948.

And further deponents saith not.

C. R. De Lay
Reynaldo Garcia

Sworn to and subscribed before me this 16 day of Aug., 1948.

J. R. Ashworth
Notary Public.

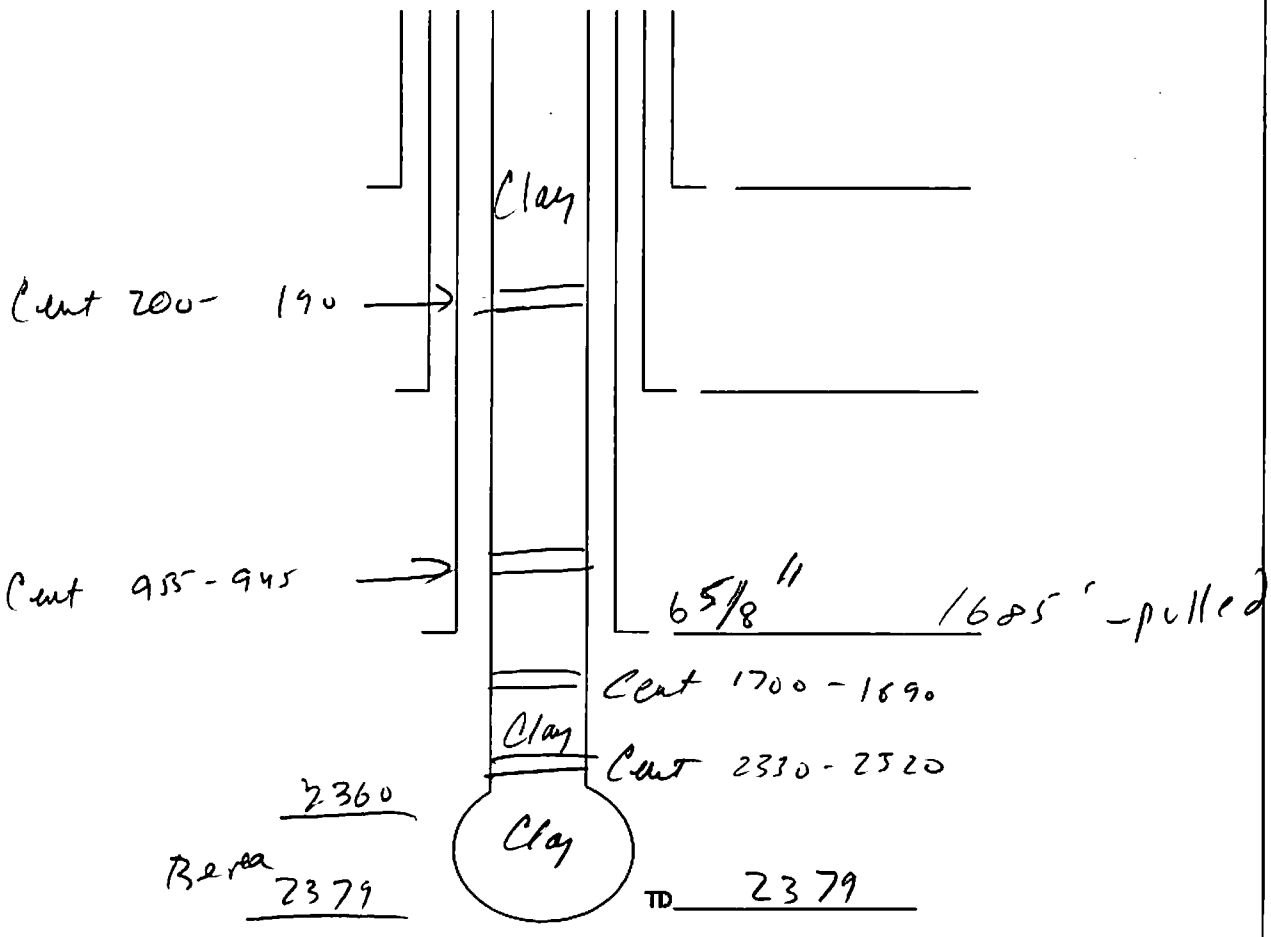
My commission expires:
Oct-9-1957

Permit No. Lin-474

Tom Fowler II

Griffithsville Unit #2 Field

47-043- 3074



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

AOR - Well Review Checklist

(110)

API Number: 47- 043 - 02237 Area Permit Number: 2R AP

Operator Name: H 6 Energy

Operator's Well #: 1

Farm Name: Wm Goode

Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐

Well Status: Active ☐ Abandoned ☐ Plugged ☒

TD of well: 2580

Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐

Easting: 416,570 Northing: 4,235,236

Elevation: 324

Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = 0

Bottom Hole Injection Pressure 0

Hydrostatic Pressure 0

Comments:

Reviewer Name: Signature:

Date Reviewed:

** Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-0223?

Production
First 24 Hours fr... { Berea Sand Bbls. Approved.
Sand Bbls. By Supt

W.M.Good Farm, No. of Lease No. Acre

Duval District Lincoln County West Virginia State

Well No. One Date of Location 19

Rig Commenced 19 } Contractor
Rig Completed 19 }

Drilling Commenced November 15th. 19 09 } Chamberlin & Company. Contractor
Drilling Completed January 4th. 19 10 }

CASING RECORD

Size	CHARGED TO WELL Feet	In	PUT IN WELL Feet	In.	BOTTOM OF CASING Feet	In.	PULLED OUT OF WELL Feet	In.	LEFT IN WELL Feet	In.	TRANSFERRED BEFORE COMPLETION Feet	In.	LEFT AT WELL NOT IN USE Feet	In.
10	18		18		18				18					
6¼	253		253		253		253							
3-5/8	1890		1890		1890				1890					

FORMATION	TOP	BOTTOM	THICKNESS
Clay		18	
Red Rock	18	40	
Red Rock & Lime	40	320	
White Sand	320	900	
Lime & Slate	900	1202	
White Lime	1202	1235	
Brown Shale	1235	1275	
Salt Sand	1275	1825	
Black Slate	1825	1830	
Little Lime	1830	1870	
Black Slate & Lime	1870	1885	
Big Lime	1885	2058	
Red Rock	2058	2097	
Sand & Slate	2097	2556	
Berea Sand	2556	2576	
Slate	2576	2580	

SHOT RECORD

Month	Day	Yr.	Size Shot	Length of Shell	Top of Shot	Bottom of Shot
1	6	10	110			
(5)	27	11	80			

4 on chart record

REMARKS:

47-043-02237

ABANDONED 19

Size	Casing Pulled	Casing Left In	

REMARKS: El = 1067 99

WWR-38

API# 47-043-2237

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY
DIVISION 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: W.M. Goode
LOCATION: Elevation: 1,066'
District: Duval
Latitude: _____
Longitude: _____

Operator Well No.: No. 1
Quadrangle: Garrett's Bend 7.5'
County: Lincoln
Deg. _____ Min. _____ Sec. _____
Deg. _____ Min. _____ Sec. _____

Well Type: Oil X Gas _____ WIW _____

Company: East Resources Inc.
P.O. Box 5519
Vienna, WV 26105
Agent: Philip S. Ondrusek
Inspector: Ralph Triplett
Permit Issued: 4/14/09'

Coal Operator or Owner: NA
Coal Operator or Owner: NA

RECEIVED
Office of Oil & Gas
JUN 01 2009
WV Department of
Environmental Protection

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Wood ss:
Mark Miller and Paul Stevens 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 East Resources Inc., well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 11th day of April, 2009', and that the well was plugged and filled in the following manner:

TYPE	FROM	TO	PIPE REMOVED		LEFT
Cement	2540'	2440'	6 5/8"	0'	1890'
Cement	1980'	1780'	5 1/2"	1925'	0'
Cement	1270'	1170'			
Cement	845'	745'			
Cement	500'	0'			
		Perforated 6 5/8" Casing; 3 Shots 1223' - 122-', 703' - 700';			
		453' - 450' & 103' - 100'			
6% Gel Between Cement Plugs					

Description of monument: 5 1/2" x 5'
and that the work of plugging and filling said well was completed on the 14th day of April 2009'
And further deponents saith not.

Mark Miller
Paul Stevens

Sworn and subscribe before me this 28th day of May, 2009

My commission expires: Oct. 4, 2016

Stephanie Perdue
Notary Public

OFFICIAL SEAL

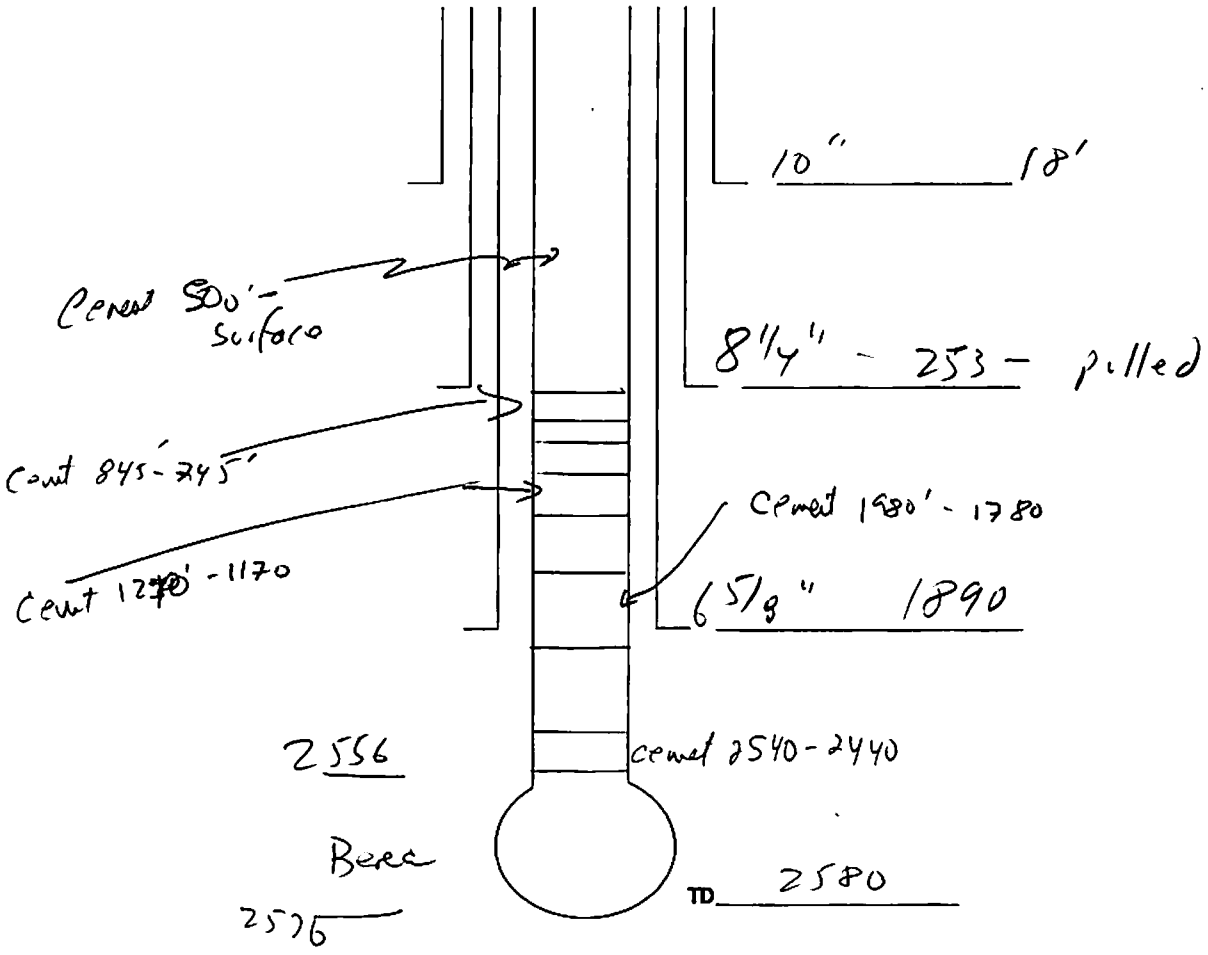
JUN 05 2009

Affidavit reviewed by the Office of Oil and Gas:

W m Goodel

Griffithsville Unit #2 Field

47-043- 0 2237



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

(111)

AOR - Well Review Checklist

API Number: 47- 043 - 2238 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 2
Farm Name: wm Goode
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☒ Plugged ☒
TD of well: 2580
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 416,731 Northing: 4,235,058
Elevation: 1329
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☐

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

TA

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47.043-02238

RM W. M. Goode WELL (2) ACRES LEASE NO. 13032

NSHIP OR RICT Duval COUNTY Lincoln STATE W. Va. N. S.80 E. W.76 Map 125W

COMMENCED 19 COMPLETED 19 CONTRACTOR

COMMENCED Mar. 14, 1910 COMPLETED Apr. 27, 1910 CONTRACTOR Chamberlin & Co.

COMMENCED 19 COMPLETED 19 CONTRACTOR

FORMATION

KIND	TOP	BOTTOM	STEEL LINE MEASUREMENT	REMARKS
lt Sand	1275	1860		
ittle Lime	1860	1890		
noil Cave	1890	1895		
g Lime	1895	2065		
g Injun	2065	2100		
ate & Shell	2100	2540		
lack Shale	2540	2555		
rea Sand	2555	2575		
ate	2575	2580		
Total Dept	2580			

Jan. 25, 1912
Run 385' Liner
Top of Liner 2080'
Bottom of Liner 2460'

CASING RECORD

SIZE	BOTTOM CASING (STEEL LINE)	PUT IN WELL (TALLY MEAS.)	PULLED (TALLY MEAS.)	LEFT IN WHEN ABN'D.
6 5/8	1895'			
5 3/16	1911			
Rod	1580			
3/4 C				

11-15-97

PACKERS

KIND	SIZE	DEPTH SET	DATE SET

TORPEDO RECORD

DATE SHOT	NO. QTS.	SIZE SHELL	TOP SHOT	BOTTOM	RESULT
Apr. 29, 1910	90qt.				
Sept. 5, 1910	180qt.				
June 20, 1911	260qt.				
Dec. 23, 1911	250qt.				

ABANDONMENT RECORD

FILLED WITH	FROM	TO	SIZE	PLUG KIND	DEPTH

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MAR 1 8 2008
WV Department of
Environmental Protection

REMARKS

TOTAL DEPTH

PRODUCTION RECORD

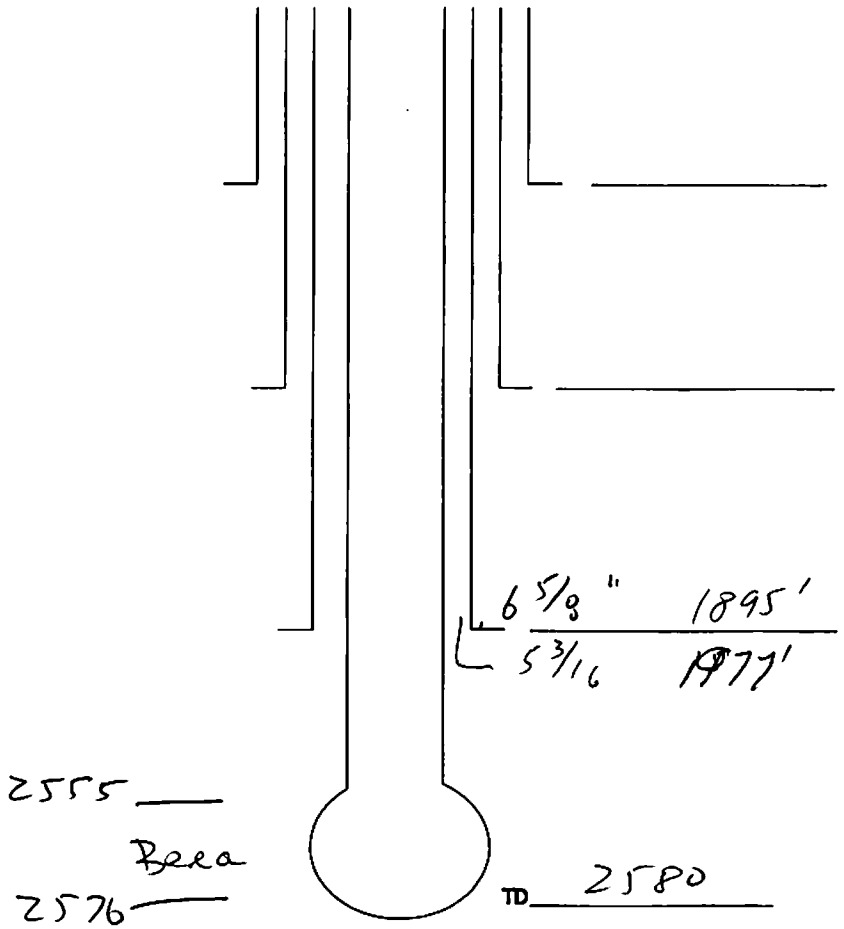
24 HOURS BEFORE SHOT SAND BBLS.
24 HOURS AFTER SHOT SAND BBLS.
GAS TEST

APPROVED BY SUPT

Wm Goodez

Griffithsville Unit #2 Field

47-043- 02238



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

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AOR - Well Review Checklist

API Number: 47- 02239 Area Permit Number: 2R AP
Operator Name: H6 E
Operator's Well #: 3
Farm Name: Wm Goode
Field Name: Griffithsville #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☐ Producer (NonWaterflood) ☑ Observation ☐ Other ☐
Well Status: Active ☑ Abandoned ☐ Plugged ☐
TD of well: 4434
Completion Zones: Dev Shale Perforated Interval: 3708- 4246

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 416,889 Northing: 14,235,100
Elevation: 325
Inside Field Boundary? ☐ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☐	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☐
Well penetrates injection zone?		No ☐	Yes ☐
Well perforated in injection zone?		No ☐	Yes ☐
Cemented across injection zone?		No ☐	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☑

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Dev Shale well Drilled deeper
5 1/2" casing set below Berea + cemented
3 1/2" (SD) cemented production string

Reviewer Name: Signature:
Date Reviewed:

** Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-02239

Production First 24 Hours from { Barrs Sand Bbls. / Sand Bbls. } Approved: By: Agent

4302239

W.M.Goode Farm, No. of Lease No. Acres

Duval District Lincoln County West Virginia State

Well No. Three Date of Location 19

Rig Commenced 19 } Contractor.
Rig Completed 19 }

Drilling Commenced May 11th. 1910 } Chamberlin & Company. Contractor.
Drilling Completed June 29th. 1910 }

CASING RECORD

Size	Changed to Well Ft.	In.	Put in Well Ft.	In.	Bottom of Casing Ft.	In.	Pulled out of Well Ft.	In.	Left in Well Ft.	In.	Kind of Shoe	Cement Ft.	In.	Size of Hole Ft.	In.
6-5/8	1878		1878		1878				1878						

RECEIVED
Office of Oil & Gas
Permitting
JUL 12 2001
WV Department of
Environmental Protection

Formation	Top	Bottom	Thickness
Surface		16	
Slate & Red Rock	16	316	
White Sand	316	450	
Black Slate	450	506	
Lime & Sand	506	650	
Slate & Sand	650	915	
Lime & Sand	915	1060	
Slate & Lime	1060	1270	
Salt Sand	1270	1828	
Slate	1828	1850	
Little Lime	1850	1868	
Pencil Cave	1868	1873	
Big Lime	1873	2053	
Big Injun Sand	2053	2108	
Slate & Shells	2108	2546	
Berea Sand	2546	2568	
Slate	2568	2570	

SHOT RECORD

Month	Day	Yr.	Size Shot	Length of Shell	Top of Shot	Bottom of Shot
7	4	10	90			
7	18	11	80			
8	2	15	150			

REMARKS:

Water in Salt Sand 1270 to 1500'

ABANDONED 19

Size	Casing Pulled	Casing Left In

REMARKS:

WR-35

23-Aug-01
API # 47 043 02239

State of West Virginia
Division of Environmental Protection
Section of Oil and Gas

Well Operator's Report of Well Work

Farm name: East Resources Inc Operator Well No.: W M Goode 3

LOCATION: Elevation: 1064.44' Quadrangle: Garrets Bend 7.5'

District: Duval County: Lincoln
Latitude: 11,475 Feet south of 38 Deg 17 Min 30 Sec.
Longitude: 9,575 Feet west of 81 Deg 55 Min 00 Sec.

Company: EAST RESOURCES, INC.
P.O. BOX 5519
VIENNA, WV 26105-5519

Agent: MICHAEL MCCOWN

Inspector: Dave Belcher
Permit Issued: 08/23/01
Well work Commenced: 09/07/01
Well work Completed: 11/29/01
Verbal plugging
permission granted on:
Rotary X Cable Rig
Total Depth (feet) 4434'
Fresh water depths (ft) NA

Salt water depths (ft) NA

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

Casing & Tubing	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
Size			
6 5/8"	1878.00	1878.00	Existing
5 1/2"	2581'	2581'	100 Sacks
3 1/2"	4418'	4418'	55 Sacks

OPEN FLOW DATA

Producing formation Devonian Shale Pay zone depth (ft) 3708'-4246'
Gas: Initial open flow 5 MCF/d Oil: Initial open flow ____ Bbl/d
Final open flow 36 MCF/d Final open flow ____ Bbl/d
Time of open flow between initial and final tests ____ Hours
Static rock pressure 278 psig (surface pressure) after 72 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

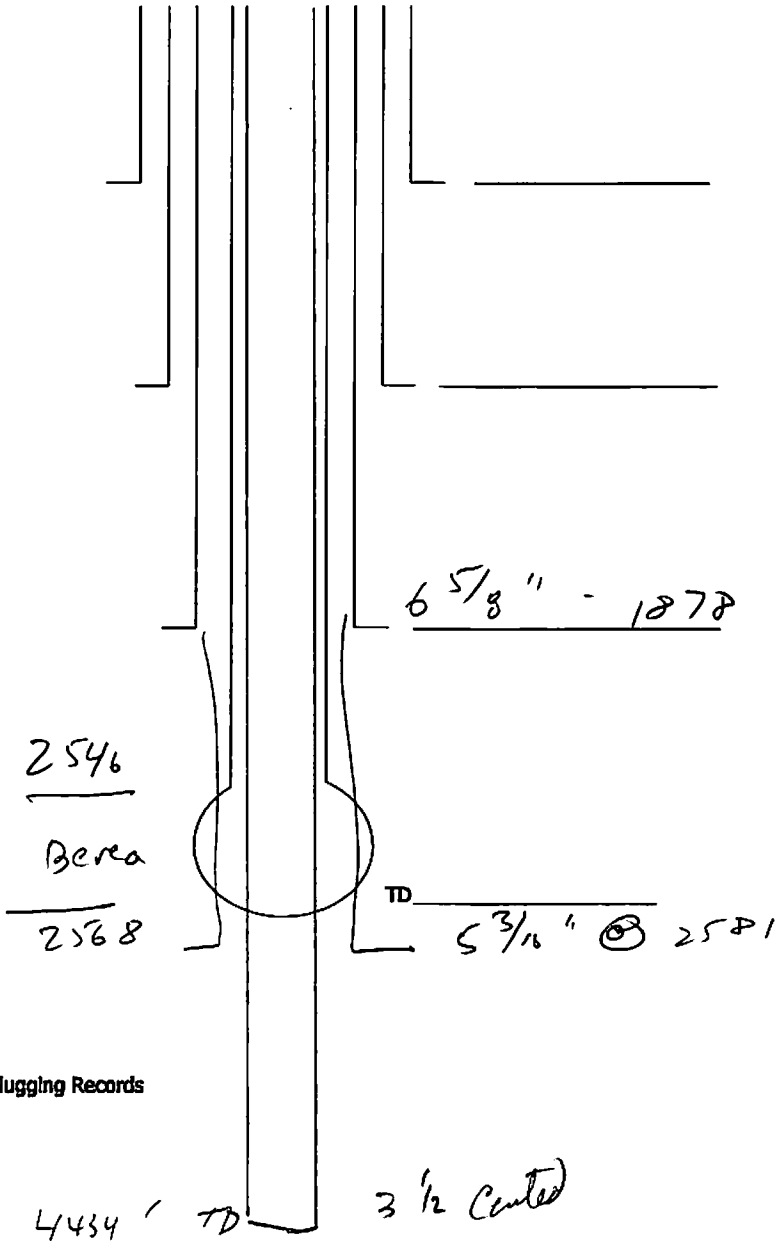
NOTE: ON BACK OF THIS FORM, PUT THE FOLLOWING: 1) DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2) THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

For: EAST RESOURCES, INC.
By: Ben Weldon
Date: 1/2/02

Wm Goode 3

Griffithsville Unit #2 Field

47-043- 02239



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

(113)

AOR - Well Review Checklist

API Number: 47- 043 - 0 2240 Area Permit Number: 2R AP

Operator Name: HGE

Operator's Well #: 4

Farm Name: Wm Good

Field Name: Griffithsville - E2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☐ Producer (NonWaterflood) ☑ Observation ☐ Other ☐

Well Status: Active ☑ Abandoned ☐ Plugged ☐

TD of well: 4407

Completion Zones: Dev Shale Perforated Interval: 2826 - 3992

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐

Easting: 416,607 Northing: 4,235,460

Elevation: 319

Inside Field Boundary? ☑ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☑	Yes ☐	
Date of Last MIT: _____	Passed?	No ☐	Yes ☐	
Open Hole Completion		No ☑	Yes ☐	
Well penetrates injection zone?		No ☐	Yes ☑	
Well perforated in injection zone?		No ☑	Yes ☐	
Cemented across injection zone?		No ☐	Yes ☑	
Packer immediately above injection zone (<100')?		No ☐	Yes ☐	No Packer ☐
		If No: Provide Depth:		
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☑	

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**

Bottom Hole Injection Pressure **0**

Hydrostatic Pressure **0**

Comments:

Dev Shale well. Drilled Deeper 3 1/2" prod csng set over shale & cemented over Berea

Reviewer Name: _____ Signature: _____

Date Reviewed: _____

** Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-02240

Production First 24 Hours from { Berea Sand Bbls. / Sand Bbls. } Approved. By Supt

W. M. Goode Farm, No. of Lease No. Acres

Duval District Lincoln County West Virginia State

Well No. Four Date of Location 19

Rig Commenced 19 } Contractor
Rig Completed 19 }

Drilling Commenced September 10th. 19 12 } Holley Oil & Dev. Company, Contractor
Drilling Completed November 9th. 19 12 }

CASING RECORD

Size	Charged to Well: Feet	In.	Put in Well: Feet	In.	Bottom of Casing: Feet	In.	Pulled out of Well: Feet	In.	Left in Well: Feet	In.	Transferred to Pure Completion: Feet	In.	Left as Well Not in Use: Feet	In.
6-5/8"	1860		1860		1860				1860					
5 3/16	1907		1907		1907				1907					

Formation	Top	Bottom	Thickness
Sand & Slate	70	125	
Slate & Red Rock	125	275	
Sand & Slate	275	1060	
Slate & Sand	1060	1160	
Salt Sand	1160	1815	
Slate	1815	1832	
Little Lime	1832	1863	
Big Lime	1863	2060	
Big Injun Sand	2060	2105	
Sand & Slate	2105	2180	
Lime & Sand	2180	2200	
Lime	2200	2230	
Slate & Shells	2230	2510	
Coffee Slate	2510	2534	
Berea Sand	2534	2554	
Total Depth,		2554	

SHOT RECORD

Month	Day	Yr.	Size Shot	Length of Shell	Top of Shot	Bottom of Shot
11	16	12	90			
1	15	14	120			

REMARKS:

Water in Salt Sand at 1160' & 1280'.

ABANDONED

Size	Casing Pulled	Casing Left In

REMARKS: El = 1051.58

WR-35

18-Mar-04

API # 47 043 2240

State of West Virginia
Division of Environmental Protection
Section of Oil and Gas

Well Operator's Report of Well Work

Farm name: HOFFMAN, HAROLD Operator Well No.: W. M. GOODE 4

LOCATION: Elevation: 1050.28' Quadrangle: GARRETT'S BEND 7.5'

District: DUVAL County: LINCOLN
Latitude: 10,325 Feet south of 38 Deg 17 Min 30 Sec.
Longitude: 10,550 Feet west of 81 Deg 55 Min 00 Sec.

COPY

Company: EAST RESOURCES, INC.
P.O. BOX 5519
VIENNA, WV 26105-5519

Agent: PHILIP S. ONDRUSEK

Inspector: RALPH TRIPLETT
Permit Issued: 03/18/04
Well work Commenced: 02/18/05
Well work Completed: 04/20/05
Verbal plugging permission granted on:
Rotary X Cable Rig
Total Depth (feet) 4407'
Fresh water depths (ft) NA

Salt water depths (ft) NA

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

Casing & Tubing	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
Size			
7"	1860.00'	1860.00'	existing
5 1/2"	1907.00'	1907.00'	existing
3 1/2"	4374.65'	4374.65	50 sks

OPEN FLOW DATA

Producing formation Devonian Shale Pay zone depth (ft) 2826'-3992'
Gas: Initial open flow 0 MCF/d Oil: Initial open flow 0 Bbl/d
Final open flow 60 MCF/d Final open flow 0 Bbl/d
Time of open flow between initial and final tests Hours
Static rock pressure 230 psig (surface pressure) after 336 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

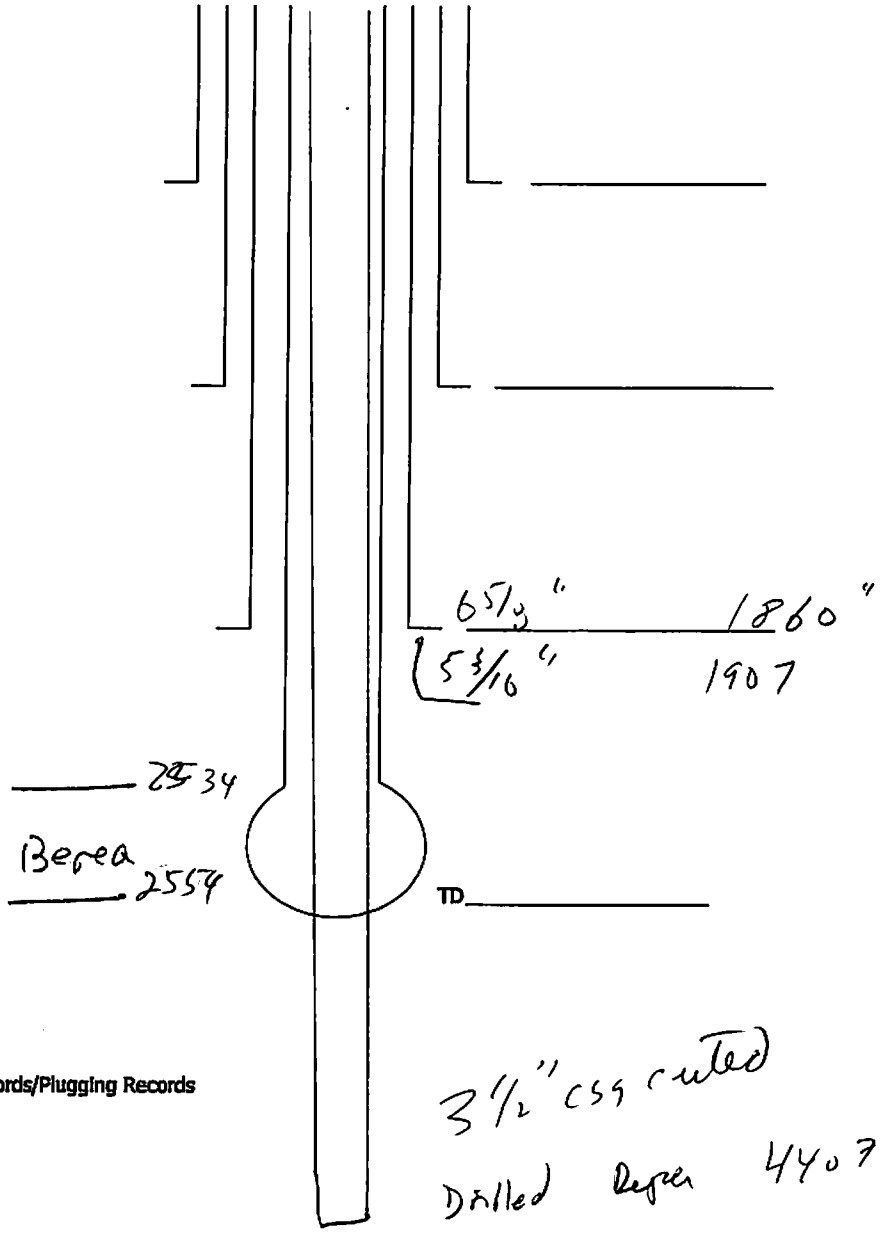
NOTE: ON BACK OF THIS FORM, PUT THE FOLLOWING: 1) DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2) THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

For: EAST RESOURCES, INC.
By:
Date: 5/17/05

W M Goodz 4

Griffithsville Unit #2 Field

47-043- 02240



From Drillers Records/Plugging Records

3 1/2" CSG cuted

Drilled Depth 4407

WVDEP OOG Internal Use Only
Rev. 6/14/16

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AOR - Well Review Checklist

API Number: 47- 043 - 30694 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 5
Farm Name: Lum Good
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2518
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 416,767 Northing: 4,235,614
Elevation: 309
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-30644

Production First 24 Hours from { Berea Sand Bbls. Approved.
{ Sand Bbls. By Supt.

W.M.Goode, Farm, No. of Lease No. Acres.

Duval District Lincoln County West Virginia State.

Well No. Five Date of Location 19

Rig Commenced 19 } Contractor.
Rig Completed 19 }

Drilling Commenced August 8th, 1914 } Holley Oil & Dev. Company Contractor.
Drilling Completed September 22nd, 1914 }

CASING RECORD

	CHARGED TO WELL		PUT IN WELL		BOTTOM OF CASING		PULLED OUT OF WELL		LEFT IN WELL		TRANSFERRED BEFORE COMPLETION		LEFT AT WELL NOT IN USE	
in	Feet	In	Feet	In.	Feet	In.	Feet	In.	Feet	In.	Feet	In.	Feet	In.
6-5/8	1882		1882		1882				1882					

FORMATION	TOP	BOTTOM	THICKNESS
Red Rock & Slate		530	
Sand & Slate	530	1080	
Slate & Shells	1080	1185	
Salt Sand	1185	1836	
Little Lime	1836	1871	
Pencil Cave	1871	1877	
Big Lime	1877	2062	
Big Injun Sand	2062	2092	
Slate & Shells	2092	2292	
Slate	2292	2480	
Brown Shale	2480	2498	
Berea Sand	2498	2518	

SHOT RECORD

Month	Day	Yr.	Size Shot	Length of Shell	Top of Shot	Bottom of Shot
9	25	15	90			
9	4	34	40	12'-4"	2504	2518

REMARKS:

Water in Salt Sand at 1285'

ABANDONED 19

Size	Casing Pulled	Casing Left In	

REMARKS: E. - 12½" 50

30694

FORM OG 8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

LEASE OR PROPERTY OWNER

ADDRESS

G. S. & H. Supply Co.
NAME OF WELL OPERATOR

Box 895, Tulsa, Okla.
COMPLETE ADDRESS

WELL AND LOCATION

August 17, 1947

Duval District

Lincoln County

Well No. 3

M. Spurlock Farm

STATE INSPECTOR SUPERVISING PLUGGING Dana K. Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

Art Hays and Carl Miller

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 M. M. Tripplehorn, ~~owner or~~ contractor, and participated in the work of plugging and filling the above well, that said work was commenced on the 19th day of April, 1949, and that the well was plugged and filled in the following manner:

BAND OR ZONE RECORD	FILLING MATERIAL			PLUGS USED	CASING	
FORMATION	CONTENT	FROM	TO	SIZE & KIND	CSG PULLED	CSG LEFT IN
	Cement & rock	2237	2222	5-3/16	1609	0
	Clay	2222	2125	6-5/8	1222	0
	Cement & rock	2125	2110			
	Cement & rock	1820	1805			
	Clay	1805	1605			
	Cement & rock	1605	1590			
	Cement & rock	1050	1035			
	Clay	1035	920			
	Cement & rock	920	905			
	Cement & rock	250	235			
	Clay	235	surface			

COAL SEAMS	DESCRIPTION OF MONUMENT
(NAME)	Cement block
(NAME)	G. S. & H. Supply Co.
(NAME)	Spurlock #3
(NAME)	5-4-49

and that the work of plugging and filling said well was completed on the 4th day of May, 1949.

And further deponents saith not.

Elmer R. Lingle

Sworn to and subscribed before me this ____ day of ____, 19____.

My commission expires: _____

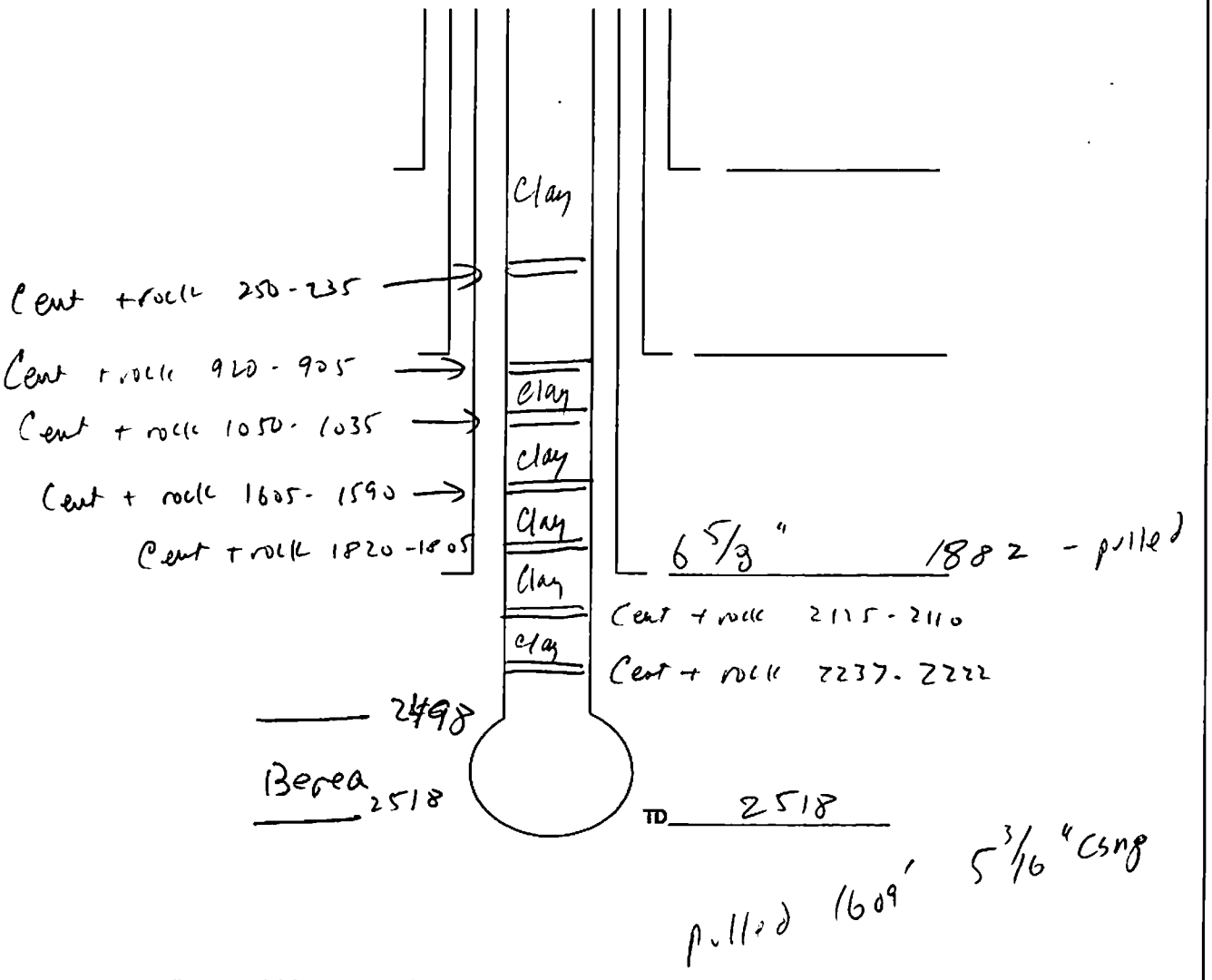
Notary Public.

Permit No. LIN-694

Wm Goodrs

Griffithsville Unit #2 Field

47-043- 30694



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

(115)

AOR - Well Review Checklist

API Number: 47- 043 - 30636 Area Permit Number: 2R AP

Operator Name: H 6 Energy

Operator's Well #: 6

Farm Name: W M Goode

Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐

Well Status: Active ☐ Abandoned ☐ Plugged ☒

TD of well: 2645

Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐

Easting: 416,918 Northing: 4,235,272

Elevation: 348

Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**

Bottom Hole Injection Pressure **0**

Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:

Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-30636

Production First 24 Hours from { Barrels Sand Bbls. Approved. / Sand Bbls. By Supt.

W.M.Goode, Farm, No. of Lease No. Acres.

Duval District Lincoln County West Virginia State.

Well No. Six Date of Location 19

Rig Commenced 19 } Contractor.
Rig Completed 19 }

Drilling Commenced November 24th. 19 16 } Wayland Oil & Gas Company, Contractor.
Drilling Completed January 18th. 19 17 }

CASING RECORD

Size	CHARGED TO WELL Feet	In	PUT IN WELL Feet	In.	BOTTOM OF CASING Feet	In.	PULLED OUT OF WELL Feet	In.	LEFT IN WELL Feet	In.	TRANSFERRED BEFORE COMPLETION Feet	In.	LEFT AT WELL NOT IN USE Feet	In.
8¼	375		375		375		376							
6/8	1955		1955		1955				1955					

FORMATION	TOP	BOTTOM	THICKNESS
Slate	1100	1190	
Lime	1190	1230	
Slate	1230	1290	
Salt Sand	1290	1909	
Little Lime	1909	1946	
Pencil Cave	1946	1948	
Big Lime	1948	2126	
Big Injun Sand	2126	2166	
Slate & Shells	2166	2246	
Lime Shells	2246	2366	
Slate & Shells	2366	2540	
Shells	2540	2600	
Brown Shale	2600	2620	
Berea Sand	2620	2645	
Oil & Gas	2623	2641	

SHOT RECORD

Month	Day	Yr.	Size Shot	Length of Shell	Top of Shot	Bottom of Shot
1	29	17	90			

REMARKS:

Water at 1330'

ABANDONED 19

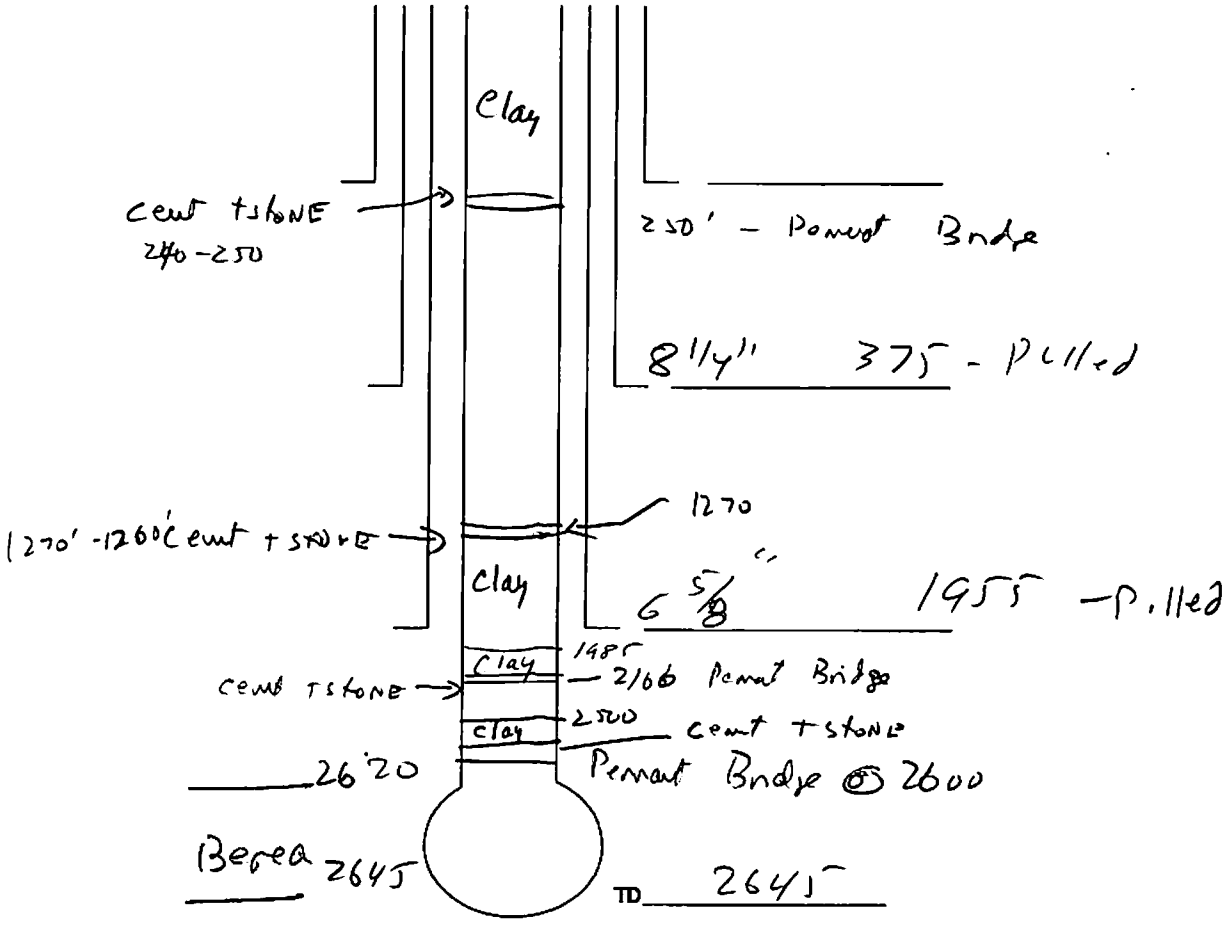
Size	Casing Pulled	Casing Left In	

REMARKS: E.= 1143 5

W M Goode 6

Griffithsville Unit #2 Field

47-043- 30636



From Drillers Records/Plugging Records

FORM OG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

47-043-30636

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER	United Fuel Gas Company — NAME OF WELL OPERATOR
ADDRESS	Charleston, W. Va. — COMPLETE ADDRESS
COAL OPERATOR OR OWNER	April 21 19 49 — WELL AND LOCATION
ADDRESS	Duval District
LEASE OR PROPERTY OWNER	Lincoln County
ADDRESS	Well No. 6
	W. M. Goode Farm

STATE INSPECTOR SUPERVISING PLUGGING D. E. Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

E. J. Elkins and Clyde Satterfield 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 R. H. Adkins, well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 23 day of March, 19 49, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD — FORMATION	FILLING MATERIAL — CONTENT	FROM	TO	PLUGS USED — SIZE & KIND	CASING — CSG PULLED	CSG LEFT IN
SET A PERMANENT BRIDGE AT 2000' - 20' above Berea Sand. 2 sacks neat cement and 5' crushed stone on bridge Filled with clay to 2500'. Neat Cement 2500' - 2490'.						
SET A PERMANENT BRIDGE AT 2166' - bottom of Big Injun. 2 sacks neat cement and 5' crushed stone on bridge. Filled with clay to 1985' - 30' below 6-5/8" Casing Neat Cement 1985' -1975'. 5' crushed stone on cement Plug.						
PULLED 6-5/8" CASING AS BALANCE OF HOLE IS FILLED AND PLUGGED						
Continued filling with clay to 1270' - 20' above Salt Sands. Neat Cement 1270' - 1260'. 5' crushed stone on cement plug.						
SET A PERMANENT BRIDGE AT 250'. 2 sacks neat cement and 5' crushed stone on bridge. Filled with clay to surface.						
Erected marker such as is described in Rule 18, 1931 Regulations						

COAL SEAMS	DESCRIPTION OF MONUMENT
(NAME)	U.F.GAS CO.
(NAME)	W. M. Goode, # 6
(NAME)	Date of Abandonment
(NAME)	

and that the work of plugging and filling said well was completed on the 4 day of April, 19 49.

And further deponents saith not.

Clyde Satterfield

Sworn to and subscribed before me this 20 day of April, 1949.

Notary Public.

My commission expires:
April 1, 1957

Permit No. LIN-636

WVDEP OOG Internal Use Only
Rev. 6/14/16

(116)

AOR - Well Review Checklist

API Number: 47- 043 - 02241 Area Permit Number: 2R AP

Operator Name: H 6 Energy

Operator's Well #: 7

Farm Name: Wm Goode

Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐

Well Status: Active ☐ Abandoned ☒ Plugged ☒

TD of well: 2561

Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐

Easting: 417,078 Northing: 4,235,415

Elevation: 320

Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐	
Date of Last MIT:	Passed?	No ☐	Yes ☐	
Open Hole Completion		No ☐	Yes ☒	
Well penetrates injection zone?		No ☐	Yes ☒	
Well perforated in injection zone?		No ☒	Yes ☐	
Cemented across injection zone?		No ☒	Yes ☐	
Packer immediately above injection zone (<100')?		No ☐	Yes ☐	No Packer ☐
		If No: Provide Depth:		
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☐	

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**

Bottom Hole Injection Pressure **0**

Hydrostatic Pressure **0**

Comments:

TA

Reviewer Name: Signature:

Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-02241

ELEVATION

FARM W. M. Goode — WELL #7 — ACRES — LEASE NO. 750

OWNERSHIP OR DISTRICT Duval — COUNTY Lincoln — STATE W. Va. — N. S. 80 E. W. Mer 125

RIG COMMENCED 9-11 19 17 — COMPLETED 11-15 19 17 — CONTRACTOR Wayland Oil & Gas Co

D. COMMENCED 19 — COMPLETED 19 — CONTRACTOR

FORMATION

KIND	TOP	BOTTOM	STEEL LINE MEASUREMENT	REMARKS
Salt sand	1193	1815		
Slate	1815	1818		
Little Lime	1818	1853		
Pencil Cave	1853	1857		
Big Lime	1857	2037		
Big Injun	2037	2082		
Slate	2082	2162		
Lime shell	2162	2266		
Slate &Shells	2266	2520		
Brown Shale	2520	2540		
Berea Sand	2540	2559		
Oil	2543	2555		
Total Dept	2561			

CASING RECORD

8-22-17

SIZE	BOTTOM CASING (STEEL LINE)	PUT IN WELL (TALLY MEAS.)	PULLED (TALLY MEAS.)	LEFT WHEN
6 5/8	1863'	1889		

5-9/16' 3/4 W.I. 3000 1/2 C 2561

PACKERS

KIND	SIZE	DEPTH SET	DATE

TORPEDO RECORD

DATE SHOT	NO. QTS.	SIZE SHELL	TOP SHOT	BOTTOM	REMARKS
11-16 1917	60qt.		2543	2558	

ABANDONMENT RECORD

FILLED WITH	FROM	TO	SIZE	PLUG KIND	DATE

REMARKS

TOTAL DEPTH

PRODUCTION RECORD

24 HOURS BEFORE SHOT — SAND — BBLS.

24 HOURS AFTER SHOT — SAND — BBLS.

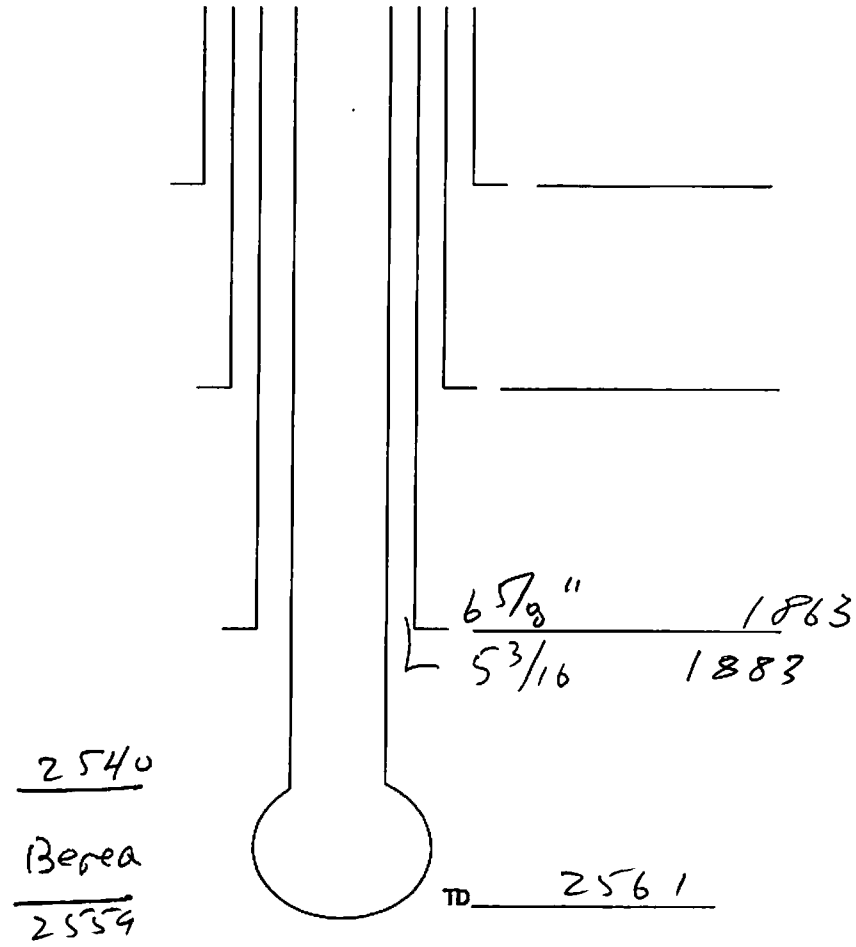
GAS TEST

APPROVED BY

W N Goody 7

Griffithsville Unit #2 Field

47-043- 0 2241



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

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AOR - Well Review Checklist

API Number: 47- 043 0241 Area Permit Number: 2R AP
Operator Name: H6 E
Operator's Well #: B
Farm Name: Wm Goode
Field Name: Guthrieville #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☐ Producer (NonWaterflood) ☑ Observation ☐ Other ☐
Well Status: Active ☑ Abandoned ☐ Plugged ☐
TD of well: 4404
Completion Zones: Dev Shale Perforated Interval: 3686 - 4193

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 417,282 Northing: 4,235,435
Elevation: 314
Inside Field Boundary? ☐ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT: _____	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☒	Yes ☐
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☐	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☑

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = 0
Bottom Hole Injection Pressure 0
Hydrostatic Pressure 0

Comments:

Dev Shale well - 5 1/2" Csng set below Berea + cmted 3 1/2" prod csg set in shale

Reviewer Name: _____ Signature: _____
Date Reviewed: _____

** Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-02242

Production First 24 Hours from { Berea Sand Bbls. / Sand Bbls. } Approved By

W.M.Goode, Farm, No. of Lease No. Acres

Duval District Lincoln County West Virginia State

Well No. Eight Date of Location 19

Rig Commenced 19 / Rig Completed 19 } Contractor

Drilling Commenced November 26th, 1917 / Drilling Completed January 11th, 1918 } Wayland Oil & Gas Company, Contractor

CASING RECORD

Size	Charged to Well Feet	In.	Put in Well Feet	In.	Bottom of Casing Feet	In.	Pulled out of Well Feet	In.	Left in Well Feet	In.	Transferred to Form Completion Feet	In.	Left in Well, Not in Use Feet	In.
8	348		348		348				348					
4-5/8	1829		1829		1829				1829					

Formation	Top	Bottom	Thickness
Salt Sand	1175	1787	
Black Lime	1787	1822	
Pencil Cave	1822	1825	
White Lime	1825	2005	
Big Injun	2005	2055	
Black Slate	2055	2145	
Lime Shell	2145	2250	
Slate & Shells	2250	2497	
Brown Shale	2497	2519	
Berea Sand	2519	2536	
Oil	2520	2535	
Gas	2520	2525	

SHOT RECORD

Month	Day	Yr.	Size Shot	Length of Shell	Top of Shot	Bottom of Shot
2	11	18	60		2520	2535

REMARKS:

Water at 1235'

ABANDONED

Size	Casing Pulled	Casing Left In	

REMARKS:

WR-35

30-Jul-01

API # 47 043 02242

State of West Virginia
Division of Environmental Protection
Section of Oil and Gas

Well Operator's Report of Well Work

Farm name: East Resources Inc Operator Well No.: W M Goode 8

LOCATION: Elevation: 1032.88' Quadrangle: Garrets Bend 7.5'

District: Duval County: Lincoln

Latitude: 10,375 Feet south of 38 Deg 17 Min 30 Sec.

Longitude: 8,275 Feet west of 81 Deg 55 Min 00 Sec.

PE Gb

Company: EAST RESOURCES, INC.
P.O. BOX 5519
VIENNA, WV 26105-5519

Agent: MICHAEL MCCOWN

Inspector: Dave Belcher

Permit Issued: 07/30/01

Well work Commenced: 08/28/01

Well work Completed: 11/28/01

Verbal plugging permission granted on:

Rotary X Cable Rig

Total Depth (feet) 4404'

Fresh water depths (ft) NA

Salt water depths (ft) NA

Is coal being mined in area (Y/N) N

Coal Depths (ft): NA

Casing & Tubing	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
Size			
6 5/8"	1829'	1829'	Existing
5 1/2"	2553'	2553'	100 Sacks
3 1/2"	4401'	4401'	55 Sacks

OPEN FLOW DATA

Producing formation Devonian Shale Pay zone depth (ft) 3686'-4193'

Gas: Initial open flow 5 MCF/d Oil: Initial open flow ____ Bbl/d

Final open flow 33 MCF/d Final open flow ____ Bbl/d

Time of open flow between initial and final tests ____ Hours

Static rock pressure 258 psig (surface pressure) after 72 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: EAST RESOURCES, ~~INC~~.

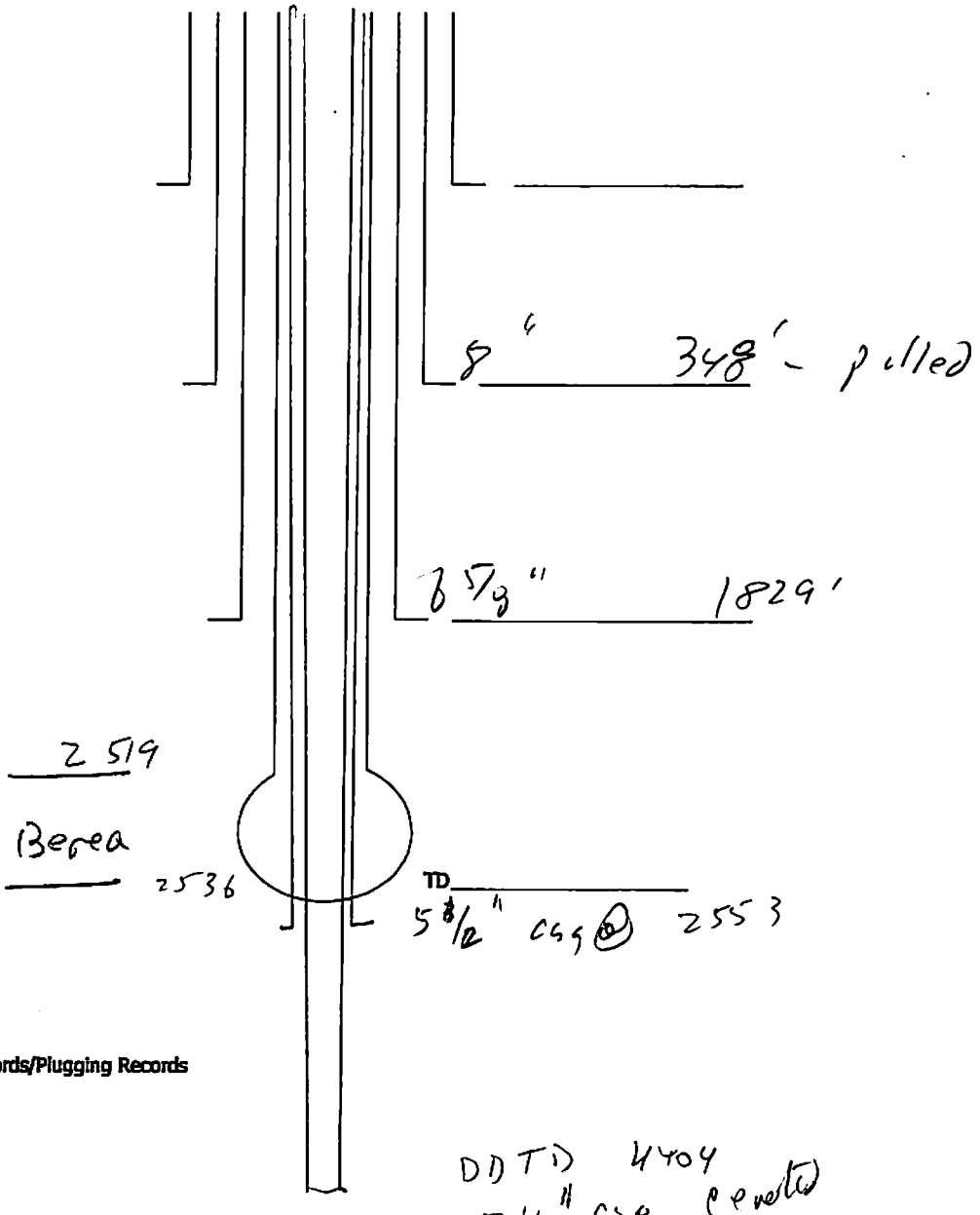
By: [signature]

Date: 11/26/02

WM Goode #8

Griffithsville Unit #2 Field

47-043- 02241



From Drillers Records/Plugging Records

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Rev. 6/14/16

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AOR - Well Review Checklist

API Number: 47- 043 -2243 Area Permit Number: 2R AP
Operator Name: H & E
Operator's Well #: 9
Farm Name: Wm Goad
Field Name: Griffithsville-2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☐ Producer (NonWaterflood) ☑ Observation ☐ Other ☐
Well Status: Active ☑ Abandoned ☐ Plugged ☐
TD of well: 4226
Completion Zones: Dev Shale Perforated Interval: 3551 - 4087

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 416,898 Northing: 4,235,772
Elevation: 285
Inside Field Boundary? ☑ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐	
Date of Last MIT: _____	Passed?	No ☐	Yes ☐	
Open Hole Completion		No ☒	Yes ☐	
Well penetrates injection zone?		No ☐	Yes ☒	
Well perforated in injection zone?		No ☒	Yes ☐	
Cemented across injection zone?		No ☐	Yes ☒	
Packer immediately above injection zone (<100')?		No ☐	Yes ☐	No Packer ☐
		If No: Provide Depth:		
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒	

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Dev Shale well Drilled deeper
3 1/2" prod csg cmted over Shale
& Berea

Reviewer Name: _____ Signature: _____
Date Reviewed: _____

** Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-02243

Production First 24 Hours from { Berea Sand > Bbls. / Sand Bbls.

Approved. 4-3-19

By Supt.

W.M.Goode, Farm, No. of Lease No. Acres

Duval District Lincoln County West Virginia State

Well No. Mine Date of Location 19

Rig Commenced 19 } Contractor

Rig Completed 19 }

Drilling Commenced October 5th. 19 18 } Contractor.

Drilling Completed November 11th. 19 18 } Hayland Oil & Gas Company

CASING RECORD

Size	Charged to Well Ft.	In.	Put in Well Ft.	In.	Bottom of Casing Ft.	In.	Pulled out of Well Ft.	In.	Left in Well Ft.	In.	Transferred to Other Completion Ft.	In.	Left at Well, Not in Use Ft.	In.
8 3/4	400		400		400		400							
6-5/8	1761		1761		1761				1761					

Formation	Top	Bottom	Thickness
Lime Shell		14	
Salt Sand	1100	1710	
Slate	1710	1715	
Little Lime	1715	1750	
Pencil Cave	1750	1767	
Big Lime	1767	1936	
Big Injun	1936	1976	
Shells	1976	2126	
Slate	2126	2412	
Brown Shale	2412	2423	
Berea Sand	2423	2440	
Oil & Gas	2425	2438	

SHOT RECORD

Month	Day	Yr.	Size Shot	Length of Shell	Top of Shot	Bottom of Shot
11	15	18	60			

REMARKS:

Big Water 1160'

6-5/8" casing with bottom hole packer

ABANDONED

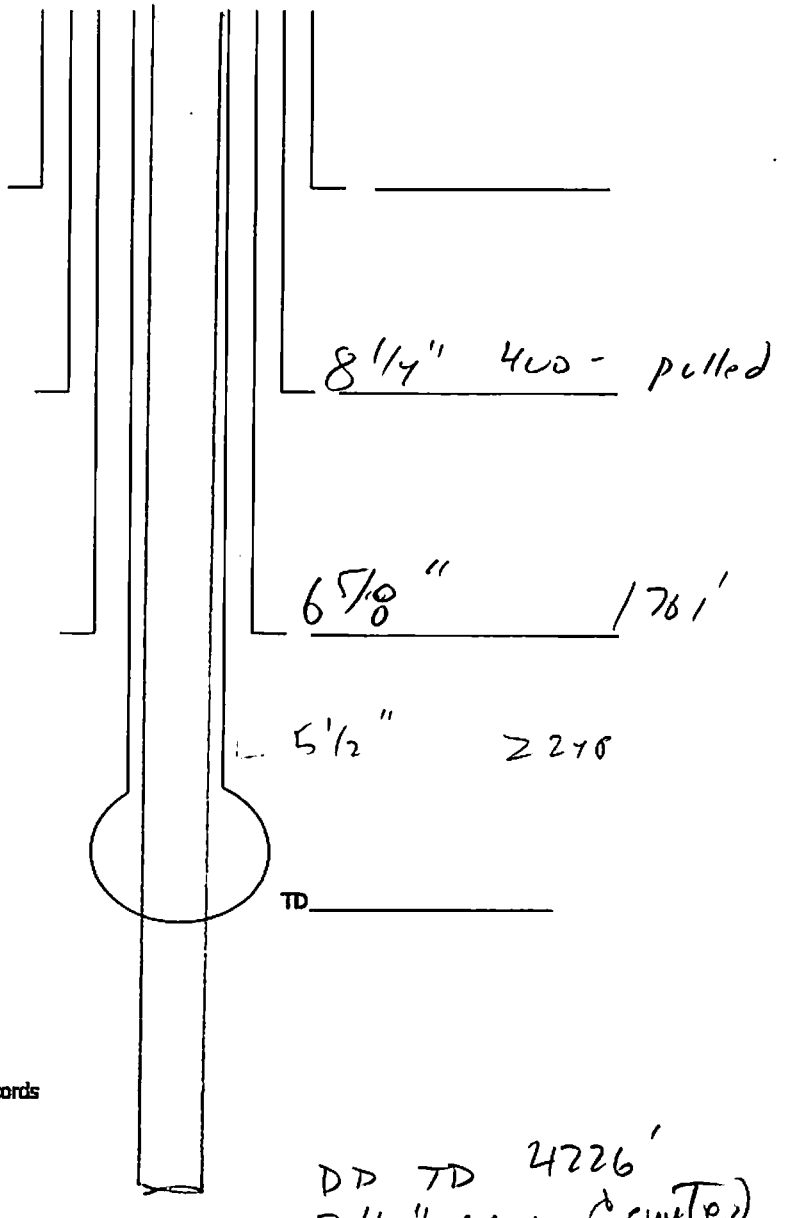
Size	Casing Pulled	Casing Left In	

REMARKS:

Wm Good 9

Griffithsville Unit #2 Field

47-043- 02243



2423

Berea

2440

From Drillers Records/Plugging Records

DD TD 4226'
3 1/2" csng Cemted

WR-35

23-Aug-01

API # 47 043 02243

State of West Virginia
Division of Environmental Protection
Section of Oil and Gas

Well Operator's Report of Well Work

Farm name: East Resources Inc Operator Well No.: W M Goode 9

LOCATION: Elevation: 940.91' Quadrangle: Garrets Bend 7.5'

District: Duval County: Lincoln

Latitude: 9,275 Feet south of 38 Deg 17 Min 30 Sec.

Longitude: 9,575 Feet west of 81 Deg 55 Min 00 Sec.

Company: EAST RESOURCES, INC.
P.O. BOX 5519
VIENNA, WV 26105-5519

Agent: MICHAEL MCCOWN

Inspector: Dave Belcher

Permit Issued: 08/23/01

Well work Commenced: 09/26/01

Well work Completed: 11/29/01

Verbal plugging permission granted on: _____

Rotary X Cable _____ Rig

Total Depth (feet) 4226'

Fresh water depths (ft) NA

Salt water depths (ft) NA

Is coal being mined in area (Y/N) N

Coal Depths (ft): NA

Casing & Tubing	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
Size			
6 5/8"	1761'	1761'	Existing
5 1/2"	2248'	2248'	100 Sacks
2 7/8"	4217'	4217'	75 Sacks

OPEN FLOW DATA

Producing formation Devonian Shale Pay zone depth (ft) 3551'-4087'

Gas: Initial open flow 5 MCF/d Oil: Initial open flow _____ Bbl/d

Final open flow 37 MCF/d Final open flow _____ Bbl/d

Time of open flow between initial and final tests _____ Hours

Static rock pressure 273 psig (surface pressure) after 72 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: EAST RESOURCES, INC.

By: [signature]

Date: 1/2/02

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Rev. 6/14/16

(119)

AOR - Well Review Checklist

API Number: 47- 043 - 02244 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 10
Farm Name: Um Goode
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2397
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 416,905 Northing: 4,235,522
Elevation: 271
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐	
Date of Last MIT:	Passed?	No ☐	Yes ☐	
Open Hole Completion		No ☐	Yes ☒	
Well penetrates injection zone?		No ☐	Yes ☒	
Well perforated in injection zone?		No ☒	Yes ☐	
Cemented across injection zone?		No ☒	Yes ☐	
Packer immediately above injection zone (<100')?		No ☐	Yes ☐	No Packer ☐
		If No: Provide Depth:		
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☐	

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**

Bottom Hole Injection Pressure **0**

Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:

Date Reviewed:

** Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

41-043 ~~02211~~
02244

Production
First 24 Hours from } ____ Sand ____ Bbls. Approved.
____ Sand ____ Bbls. By ____ Supt.

W. M. Goode Farm, No. of Lease ____ No. Acres.
Duval District Lincoln County West Va State.
Well No. 10 #166 Date of Location May 5th 1920
Rig Commenced May 11th 1920 19
Rig Completed May 21st 1920 19 } J.R.Worstell Contractor.
Drilling Commenced May 28th 1920 19
Drilling Completed June 30th 1920 19 } Eddystone Oil Corp Contractor.

CASING RECORD

Size	Charged to Well: Feet	In.	Put in Well: Feet	In.	Bottom of Casing: Feet	In.	Pulled out of Well: Feet	In.	Left in Well: Feet	In.	Transferred before Completion: Feet	In.	Left at Well not in Use: Feet	In.
8-1/4			267				267							
6-5/8			1713						1713					

Formation	Top	Bottom	Thickness
Conductor		16	
Blue Mud	16	200	
Slate	200	210	
Sand	210	225	
Blue Mud	225	265	
Sand	265	300	
Slate	300	320	
Sand	320	350	
Slate	350	400	
Sand	400	550	
Slate	550	600	
Lime	600	630	
Sand	630	700	
Slate	700	810	
Lime	810	840	
Slate	840	880	
Sand	880	900	
Slate	900	1050	
Lime	1050	1070	
Salt Sand	1070	1663	
Little Lime	1663	1693	
Pencil Cave	1693	1703	
Big Lime	1703	1888	
Big Injun Sand	1888	1933	
Shells	1933	2356	
Brown Shale	2356	2378	
Berea Sand	2378	2397	
Total Depth.		2397	S.L.M.

SHOT RECORD

Month	Day	Yr.	Size Shot	Length of Shell	Top of Shot	Bottom of Shot
July	2	20	60	16	2380	2396

REMARKS:
Marietta Torpedo Co. Marietta Ohio

ABANDONED ____ 19____

Size	Casing Pulled	Casing Left In

REMARKS: El= 697 02

WR-38
6-May-99

API # 47-43-02244-P

47-043-02744

STATE OF WEST VIRGINIA
DIVISION OF ENVIRONMENTAL PROTECTION
SECTION 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: Hoffman, Harold — Operator Well No.: WM Goode # 10
LOCATION: Elevation: 893.00 — Quadrangle: Garretts Bend
District: Duval — County: Lincoln
Latitude: 10225 — Feet South of 38 Deg. 17 Min. 30 Sec.
Longitude 9600 — Feet West of 81 Deg. 55 Min. 0 Sec.

Well Type: OIL X GAS _____

Company: S. L. Meadows, Jr. Production, Inc.
ROUTE 2 BOX 22
RAVENSWOOD, WV 26164

Coal Operator or owner: N/A

Agent: S. L. Meadows, Jr.

Coal Operator or owner: N/A

Permit Issued:

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of _____ ss:

Jason Meadows and Bill Ferrebee 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 Rod Dillon Oil and Gas Inspector representing the Director, say that said work was commenced on the 16 day of July, 1999, and that the well was plugged and filled in the following manner:

TYPE	FROM	TO	PIPE REMOVED		LEFT
Gel	2400	2300	2⅜ Tubing	2375	-0-
Cement	2300	2200			
Gel	2200	1950	5 ½ Csg	1760	-0-
Cement	1950	1850			
Gel	1850	1800	7 Csg	109	1604
Cement	1800	1700	Shot 7 Csg @	1199	
Gel	1700	1250		809	
Cement	1250	1150		506	
Gel	1150	850	Free	109	
Cement	850	750			
Gel	750	550			
Cement	550	450			
Gel	450	100			
Cement	100	-0-			

Description of monument: 5 ½ Csg 5 ft long and that the work of plugging and filling said well was completed on the 23 day of July, 1999.

And further deponents saith not. _____

Sworn and subscribe before me this 26 day of July, 1999
My commission expires: December 24, 2007

Zelma M Meadows
Notary Public

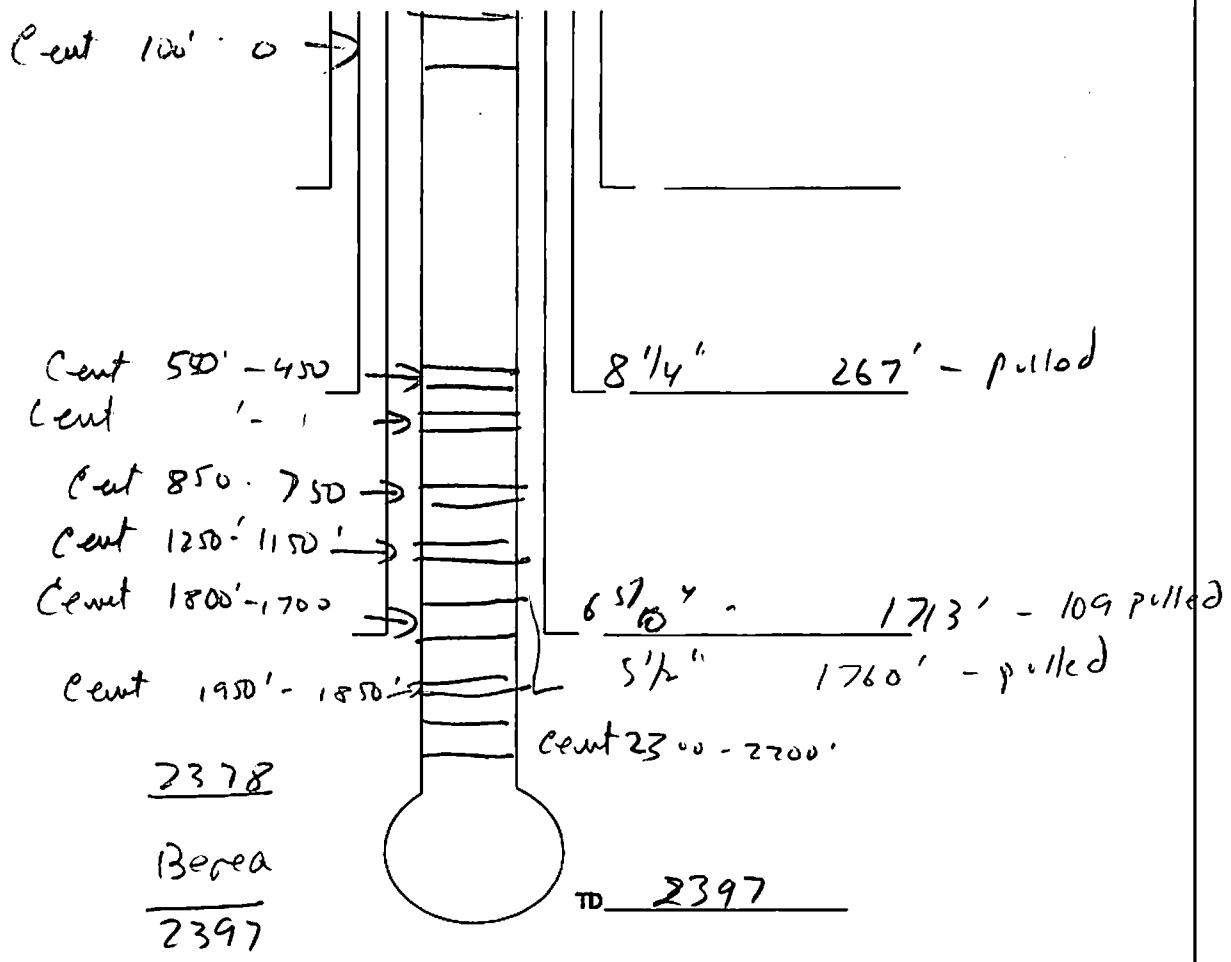
Official Seal
Notary Public, State of West Virginia
Zelma M. Meadows
Route 2, Box 22
Ravenswood, WV 26164
My commission expires December 24, 2007

Oil & Gas Inspector Rod Dillon

Wm Goode 10

Griffithsville Unit #2 Field

47-043- 02244



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/24/16

(120)

AOR - Well Review Checklist

API Number: 47- 043 - 02245 Area Permit Number: 2R AP

Operator Name: H6E

Operator's Well #: 11

Farm Name: W M Goode

Field Name: Goth Bull #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☐ Producer (NonWaterflood) ☒ Observation ☐ Other ☐

Well Status: Active ☐ Abandoned ☒ Plugged ☐

TD of well: 2393

Completion Zones: Berea Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐

Easting: 417,097 Northing: 4,235,749

Elevation: 270

Inside Field Boundary? ☐ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐	
Date of Last MIT:	Passed?	No ☐	Yes ☐	
Open Hole Completion		No ☐	Yes ☒	
Well penetrates injection zone?		No ☐	Yes ☒	
Well perforated in injection zone?		No ☒	Yes ☐	
Cemented across injection zone?		No ☒	Yes ☐	
Packer immediately above injection zone (<100')?		No ☐	Yes ☐	No Packer ☐
		If No: Provide Depth:		
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☐	

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = 0

Bottom Hole Injection Pressure 0

Hydrostatic Pressure 0

Comments:

Temp Abandoned

Reviewer Name: Signature:

Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

Well No. 11 #263 Date of Location November 25 19 2

Rig Commenced 2-14-21 19
Rig Completed 2-19-21 19 } Eddystone Oil Corp Contract

Drilling Commenced 3-26-21 19
Drilling Completed 5-5-21 19 } Eddystone Oil Corp Contract

CASING RECORD

Size	CHARGED TO WELL Feet	In	PUT IN WELL Feet	In.	BOTTOM OF CASING Feet	In.	PULLED OUT OF WELL Feet	In.	LEFT IN WELL Feet	In.	TRANSFERRED BEFORE COMPLETION Feet	In.	LEFT AT WELL NOT IN USE Feet
8 1/4"			330						330				
5-5/8			1730						1730				

FORMATION	TOP	BOTTOM	THICKNESS
Conductor	0	16	
Red Mud	16	250	
Sand	250	275	
Slate	275	340	
Sand	340	400	
Slate	400	450	
Sand	450	525	
Slate	525	600	
Sand	600	845	
Slate	845	1000	
Lime	1000	1050	
Salt Sand	1050	1620	
Maxon Sand	1620	1665	
Little Lime	1665	1698	
Pencil Cave	1698	1704	
Big Lime	1704	1889	
Big Injun Sand	1889	1940	
Slate & Shells	1940	2040	
Lime Shell	2040	2110	
Slate	2110	2354	
Brown Shale	2354	2374	
Berea Sand	2374	2393	
Oil	2374	2393	S L M
Total Depth,		2393	S L M

SHOT RECORD

Month	Day	Yr.	Size Shot	Length of Shell	Top of Shot	Bottom Shot
May	11	21	80	17'6"	2375	2392

REMARKS:

ABANDONED

Size	Casing Pulled	Casing Left In	

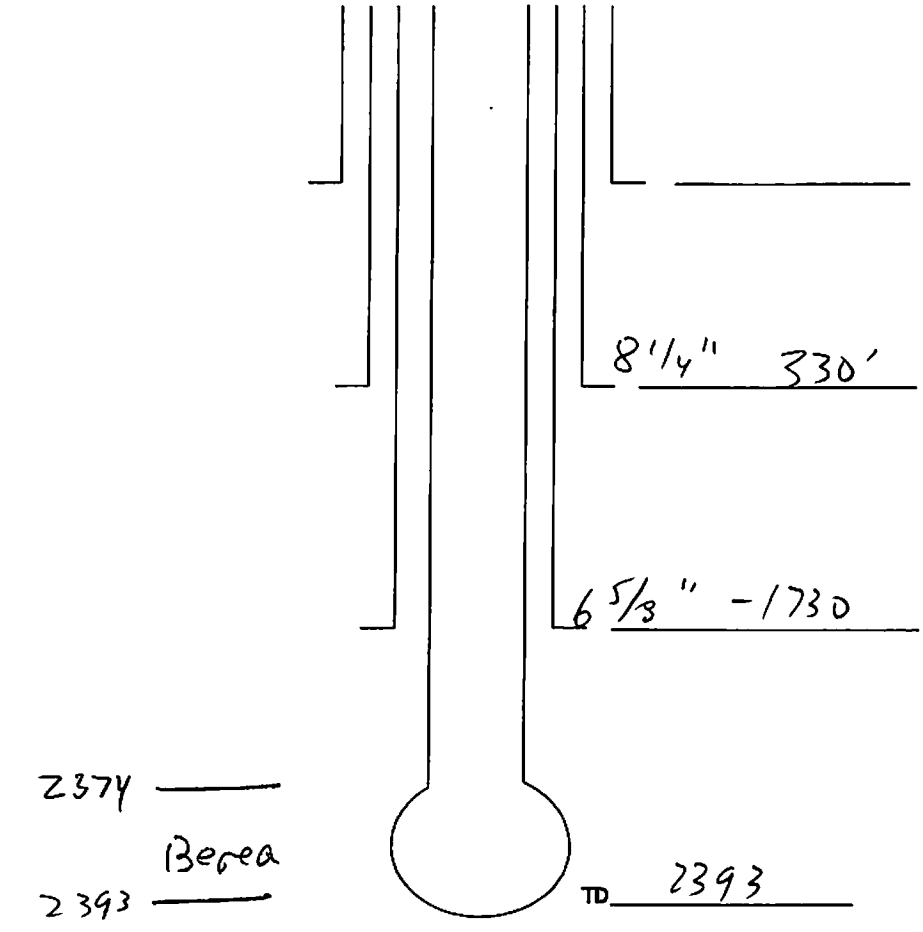
REMARKS: El = 894.00

47-043-02245

W M Goode 11

Griffithsville Unit #2 Field

47-043- 02245



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

121

AOR - Well Review Checklist

API Number: 47- 043 - 02246 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 12
Farm Name: Wm Goode
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well:
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 417,280 Northing: 4,235,755
Elevation: 297
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

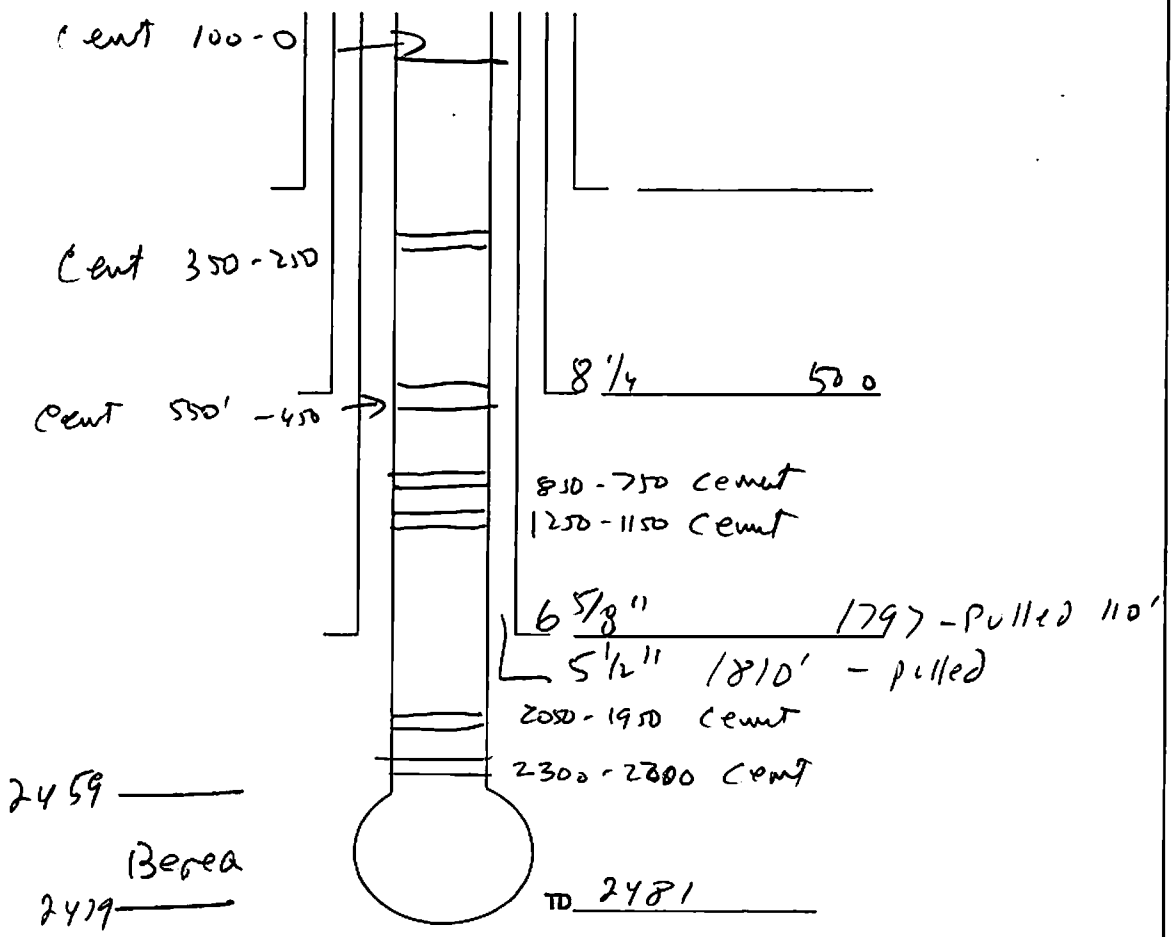
Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

Wm Goode 12

Griffithsville Unit #2 Field

47-043- 02246



From Drillers Records/Plugging Records

WR-38
12-May-99

API # 47-43-02246-P

STATE OF WEST VIRGINIA
DIVISION OF ENVIRONMENTAL PROTECTION
SECTION 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: Hoffman, Harold **Operator Well No.:** WM Goode # 12
LOCATION: **Elevation:** 978.00 **Quadrangle:** Garretts Bend
District: Duval **County:** Lincoln
Latitude: 9400 Feet South of 38 **Deg.** 17 Min. 30 Sec.
Longitude 8300 Feet West of **Deg.** 55 Min. 0 Sec.

Well Type: OIL X GAS _____

Company: S. L. Meadows, Jr. Production, Inc.
ROUTE 2 BOX 22
RAVENSWOOD, WV 26164

Coal Operator or owner N/A

Agent: S. L. Meadows, Jr.

Coal Operator or owner N/A

Permit Issued:

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of _____ ss:

Jason Meadows and Bill Ferrebee 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 Rod Dillon Oil and Gas Inspector representing the Director, say that said work was commenced on the 30 day of June, 1999, and that the well was plugged and filled in the following manner:

TYPE	FROM	TO	PIPE REMOVED		LEFT
Gel	2481	2300	2⅜ Tubing	2440	-0-
Cement	2300	2200	5 ½ Csg	1810	-0-
Gel	2200	2050	6⅝ Csg	110	1687
Cement	2050	1950	NO 8 ¼ in well		
Gel	1950	1250			
Cement	1250	1150	Shot well	1197	
Gel	1150	850		798	
Cement	850	750		482	
Gel	750	550		285	
Cement	550	450		110	
Gel	450	350			
Cement	350	250			
Gel	250	100			
Cement	100	-0-			

Description of monument: 5 ½ Csg 5 ft long and that the work of plugging and filling said well was completed on the 7 day of July, 1999.

And further deponents saith not. S. L. Meadows, Jr.

Sworn and subscribe before me this 12 day of July, 1999
My commission expires: December 24, 2007

Official Seal
Notary Public, State of West Virginia
Zelma M. Meadows
Route 2, Box 22
Ravenswood, WV 26164
My commission expires December 24, 2007

Zelma M Meadows
Notary Public

Oil and Gas Inspector Rod Dillon

12

47-043-02246

Well No. 14 W. M. Goode Farm 151 Acres
Lease No. 75055 Duval District Lincoln County Va. State
So. Penn Employees Contractor SOUTH PENN DRILLING TOOLS INC. Contractor
Drilling Commenced Oct. 24 1927 Drilling Completed Dec. 1, 1927
N. S. E. W.

ROCK FORMATION	TOP	BOTTOM	Steel Line Measurement	REMARKS
Conductor		16		
Red Rock	16	340		
Slate & Shells	340	500		
Water		480		
Sand	500	530		
8¼" Casing		500		
Slate & Shells	530	640		
Sand	640	650		
Black Slate	650	660		
Sand	660	730		
Slate	730	750		
Sand	750	800		
Water (one bailer per hour)		780		
Slate	800	1060		
Sand	1060	1090		
Slate & Shells	1090	1140		
Salt Sand	1140	1693		
Water - Hole full		1400		
Maxon Sand	1693	1740		
Break	1740	1743		
Little Lime	1743	1773		
Pencil Cave	1773	1778		

CASING RECORD AS TALLIED. NOT STEEL LINE MEASUREMENT

SIZE	PUT IN WELL FEET	PUT IN WELL IN.	PULLED OUT FEET	PULLED OUT IN.	LEFT IN WELL FEET	LEFT IN WELL IN.

accident

Shot Date
Amount
Sand
Result
Packer Size
Depth Set

47-043-02246

12

Well No. 17 W. M. Goode "Continued" Farm Acres
Lease No. District County State
Contractor Contractor
Drilling Commenced 192 Drilling Completed 192
N. S. E. W.

ROCK FORMATION	TOP	BOTTOM	Steel Line Measurement	REMARKS
Big Lime	1778	1970		El=979.2!
6⅝" Casing		1797	1797	
Big Injun	1970	4015		
Slate & Shell	4015	4439		
Brown Shale	4439	4459		
Berea Sand	4459	4479	4479	
Oil	4466	4476		
Total Depth		4481		

CASING RECORD AS TALLIED. NOT STEEL LINE MEASUREMENT

	PUT IN WELL		PULLED OUT		LEFT IN WELL	
SIZE	FEET	IN.	FEET	IN.	FEET	IN.
8¼"	500	—				
6⅝"	1797	—				

Shot Date 12/4/27
Amount 80 qts.
Sand Berea
Result Open Flow

Packer Size Std. Shoe Used

Depth Set 1797

Production First 24 Hours Est. 4 Bbls. Gas Test

Approved by A. H. Anderson Superintendent.

WVDEP OOG Internal Use Only
Rev. 6/14/16

122

AOR - Well Review Checklist

API Number: 47- 043 - 30283 Area Permit Number: 2R AP

Operator Name: H 6 Energy

Operator's Well #: 1

Farm Name: TA + M A Griffith

Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐

Well Status: Active ☐ Abandoned ☐ Plugged ☒

TD of well: 2257

Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐

Easting: 416 904 Northing: 4,230,352

Elevation: 236

Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐	
Date of Last MIT:	Passed?	No ☐	Yes ☐	
Open Hole Completion		No ☐	Yes ☒	
Well penetrates injection zone?		No ☐	Yes ☒	
Well perforated in injection zone?		No ☒	Yes ☐	
Cemented across injection zone?		No ☒	Yes ☐	
Packer immediately above injection zone (<100')?		No ☐	Yes ☐	No Packer ☐
		If No: Provide Depth:		
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☐	

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**

Bottom Hole Injection Pressure **0**

Hydrostatic Pressure **0**

Comments:

WR 38 - NA

Reviewer Name: Signature:

Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

WELL RECORD

Permit No. Lin 289

Oil or Gas Well (KIND) Oil

Company Frick-Reid Supply Corporation
Address Drawer 2481, Tulsa, Okla.
Farm T. A. & M. A. Griffith Acres 160
Location (waters) Porter's Fork, Mud River
Well No. One Elev. 772
District Duval County Lincoln
The surface of tract is owned in fee by J. W. Stickler
Address Yawkey, W. Va.
Mineral rights are owned by Mrs. M. A. Hill and T. A. Griffith Hrs Address Madison, W. Va.
Drilling commenced January 8, 1909
Drilling completed February 22, 1910.
Date Shot 2-26-1910 From 2233 To 2253
With 90 Qts. Nitro-Glycerine
Open Flow /10ths Water in ..... Inch
/10ths Merc. in ..... Inch
Volume ..... Cu. Ft.
Rock Pressure ..... lbs. ..... hrs.
Oil ..... bbls., 1st 24 hrs.
Fresh water ..... feet ..... feet
Salt water ..... feet ..... feet

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			
16			Kind of Packer
13			
10 Wood	15	15	Size of
8¼	325	----	
6⅝	1558	1558	Depth set
5 3/16			
3			Perf. top
2		2253	Perf. bottom
Liners Used			Perf. top
			Perf. bottom

CASING CEMENTED ..... SIZE ..... No. Ft. ..... Date

COAL WAS ENCOUNTERED AT ---- FEET ---- INCHES
--- FEET --- INCHES --- FEET --- INCHES
--- FEET --- INCHES --- FEET --- INCHES

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks
Soil			0	15			
Slate			15	50			
Sand			50	120			
Lime			120	160			
Slate			160	290			
Sand			290	365			
Shells & Sand			365	600			
Sand			600	660			
Slate			660	820			Hole Full
Salt Sand			820	1470	Salt Water	865	Salt Water at 910
Slate			1470	1510			
Little Lime			1510	1550			
Pencil Cave			1550	1558	1558'-1½'		
Big Lime			1558	1760			
Sand			1760	1820			
Slate & Shells			1820	1950			
Slate			1950	2233			
Berea Sand			2233	2253			
Bottom of hole			2257				

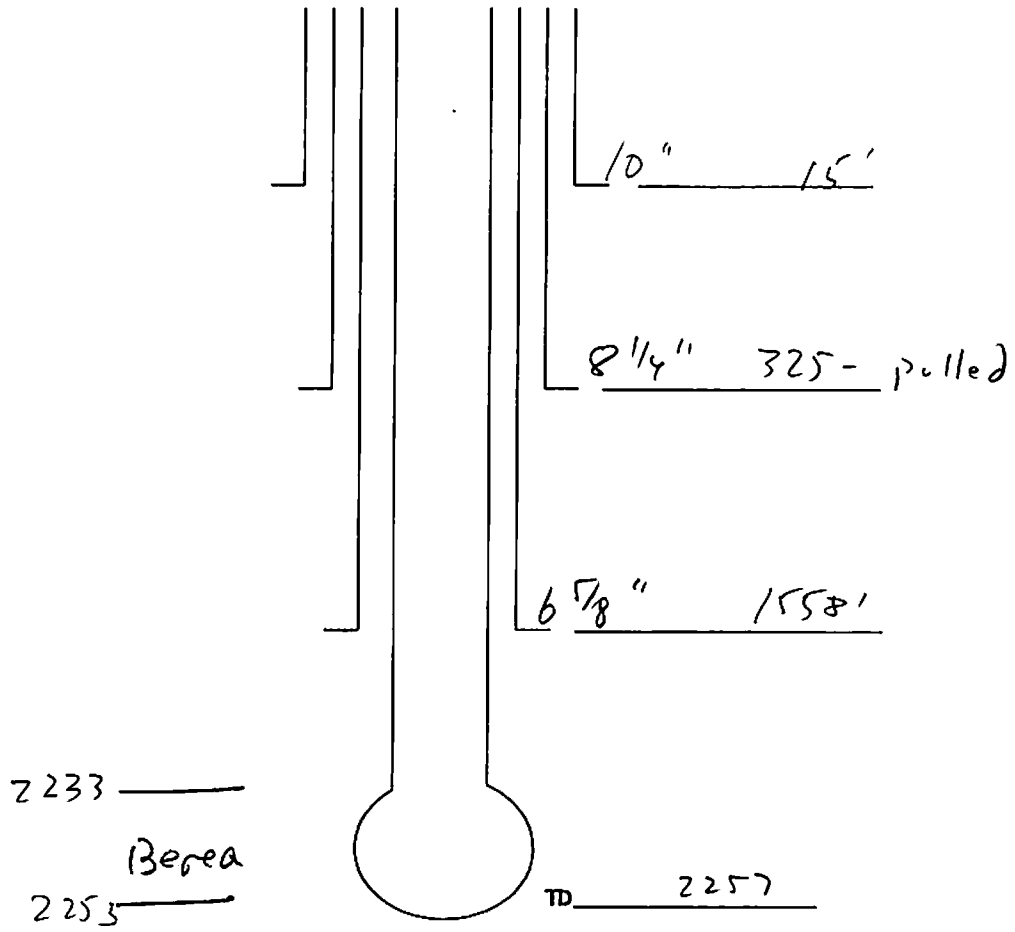
FEB 1942
WEST VIRGINIA
DEPARTMENT OF MINES

(Over)

TA + MA Griffith

Griffithsville Unit #2 Field

47-043- 30283



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

123

AOR - Well Review Checklist

API Number: 47- 043 - 30597 Area Permit Number: 2R AP

Operator Name: H 6 Energy

Operator's Well #: 2

Farm Name: TA Griffith

Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐

Well Status: Active ☐ Abandoned ☐ Plugged ☒

TD of well: 2294

Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐

Easting: 416,963 ' ' Northing: 4,230,536

Elevation: 945

Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**

Bottom Hole Injection Pressure **0**

Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:

Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-30597

Well No. 2 Tunnell Griffith Farm 160 Acres
Lease No. 2225 Duval Township District Lincoln County W Va. State
United Fuel Drilling Co. Contractor Contractor
Drilling Commenced -19- Drilling Completed April 25 1909
N. S. 83 E. W. 75-6 Elevation

Rock Formation	Top	Bottom	Steel Line Measurement	Remarks
Sand	50	120		
Lime	120	160		
Slate	160	290		
Sand	290	365		
Shells and Slate	365	600		
Sand and Slate	600	845		
Salt Sand	845	1495		
Slate	1495	1530		
Little Lime	1530	1570		
Pencil Cave	1570	1575		
Big Lime	1575	1780		
Sand	1780	1840		
Slate & Shells	1840	2270		
Berea Sand	2270	2290		
Total Depth		2294		

Purchased 12-11-41 from Virginian Gasoline and Oil Company

CASING RECORD AS TALLIED. NOT STEEL LINE MEASUREMENT.

	Put in Well		Pulled Out		Left in Well	
Size	Feet	In.	Feet	In.	Feet	In.
6 5/8 10" Wood Rod. 16'	1577				1577 16	

Shot Date April 29. 1909
Amount 90 Quarts
Sand
Result
Packer Size
Depth Set

Production First 24 Hours ____ Bbls. Gas Test ____

Approved by E. B. South Superintendent

FORM OG-6

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

47-043-30597

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

LEASE OR PROPERTY OWNER

ADDRESS

United Fuel Gas Company
NAME OF WELL OPERATOR

Charleston, W. Va.
COMPLETE ADDRESS

April 1, 19 49
WELL AND LOCATION

Duval District

Lincoln County

Well No. #2

T. A. Griffith Farm

STATE INSPECTOR SUPERVISING PLUGGING D. E. Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

W. C. Pack and Seymour Woodall 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 R. H. Adkins, well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 9th day of March, 1949, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD		FILLING MATERIAL		PLUGS USED	CASING	
FORMATION	CONTENT	FROM	TO	SIZE & KIND	CSG PULLED	CSG LEFT IN
Set a Permanent Bridge at 2250' - 20' above Berea Sand. 2 Sacks neat cement and 5' crushed stone on bridge filled with clay to 2150' Neat Cement 2150' - 2140'						
Set a Permanend Bridge at 1670' - 30' below Big Injun. 2 sacks neat cement and 5' crushed stone on bridge. Filled with clay to 1607' - 30' below 6-5/8" casing. Neat Cement 1607' - 1597'. 5' crushed stone on cement plug - sealing hole completely below 6-5/8" casing.						
PULLED 6-5/8" CASING AS BALANCE OF HOLE WAS FILLED AND PLUGGED.						
Filled with clay to 825' - 20' above Salt Sands. Neat Cement 825' - 815'						
Opened hole to 200'. Set a Permanent Bridge at 200'. 2 sacks neat cement and 5' crushed stone on bridge. Filled with clay to surface.						
Set Cement Marker 12" x 12" x 30" Marking date of abandonment (Rule 18, 1931)						

COAL SEAMS	DESCRIPTION OF MONUMENT
(NAME)	U. F. G. CO.
(NAME)	T. A. Griffith, Well # 2
(NAME)	Date of abandonment
(NAME)	

APR 1949 WEST VIRGINIA DEPARTMENT OF MINES

and that the work of plugging and filling said well was completed on the 21st day of March, 1949.

And further deponents saith not.

W C Pack
Seymour Woodall

Sworn to and subscribed before me this 1 day of April, 1949

Notary Public.

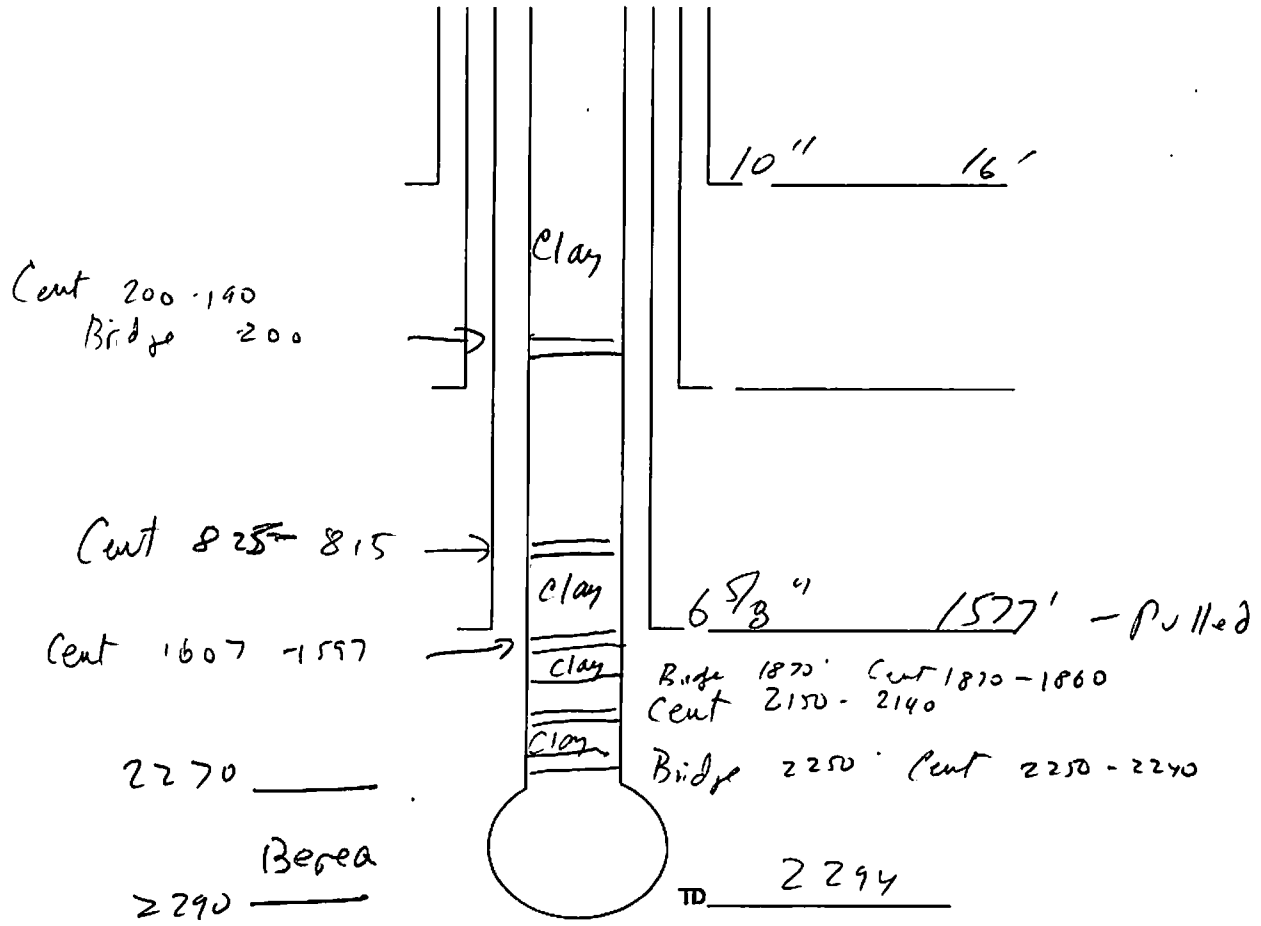
My commission expires:
April 1, 1957

Permit No. LIN-597

TH Griffith 2

Griffithsville Unit #2 Field

47-043- 30597



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

(124)

AOR - Well Review Checklist

API Number: 47- 043 - 70063 Area Permit Number: 2R AP

Operator Name: H 6 Energy

Operator's Well #: 3

Farm Name: TA Griffith

Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐

Well Status: Active ☐ Abandoned ☐ Plugged ☒

TD of well:

Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐

Easting: 416,897 Northing: 4,230,238

Elevation: 272

Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☐

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**

Bottom Hole Injection Pressure **0**

Hydrostatic Pressure **0**

Comments:

WR 35 + WR 38 - NA.

Reviewer Name: Signature:

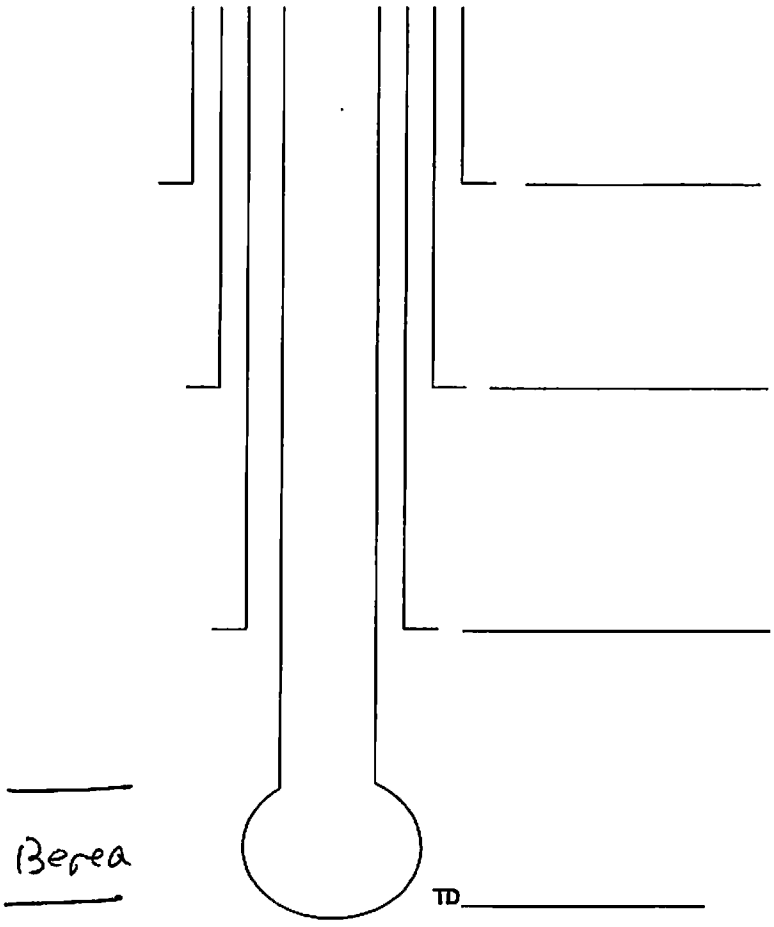
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

TA Smith 3

Griffithsville Unit #2 Field

47-043- 70063



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only

Rev. 6/14/16

125

AOR - Well Review Checklist

API Number: 47- 043 - 70064 Area Permit Number: 2R AP

Operator Name: H 6 Energy

Operator's Well #: 4

Farm Name: TR Griffith

Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐

Well Status: Active ☐ Abandoned ☐ Plugged ☒

TD of well:

Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐

Easting: 416,889 Northing: 4,229,994

Elevation: 327

Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☐

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**

Bottom Hole Injection Pressure **0**

Hydrostatic Pressure **0**

Comments:

Need WR35 & WR38 - NA

Reviewer Name: Signature:

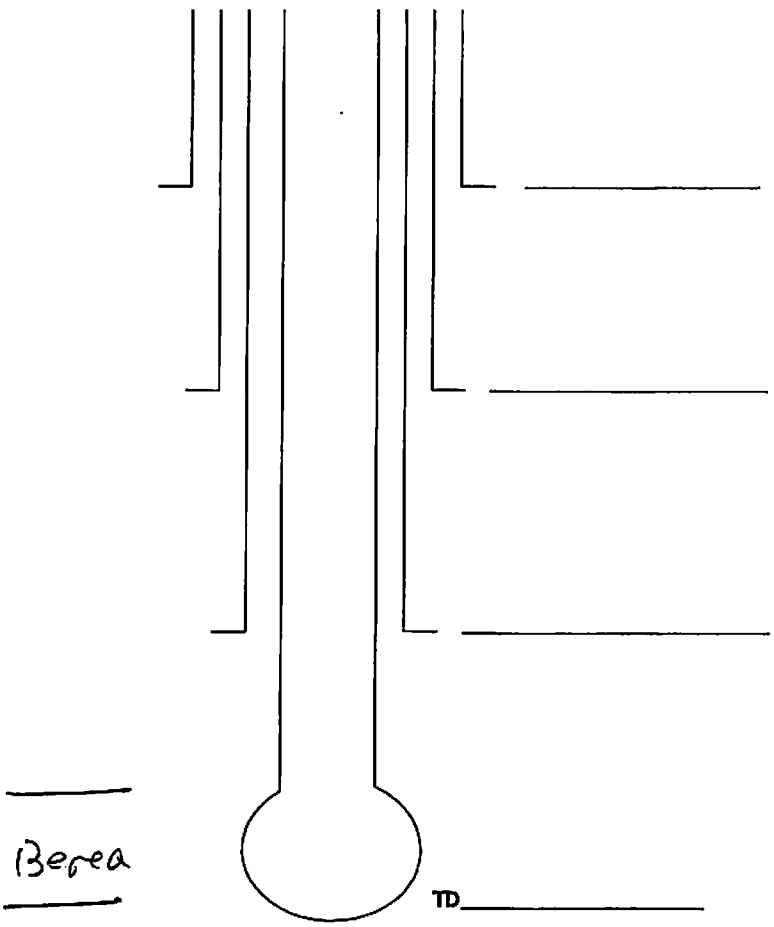
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

TG Gantz 4

Griffithsville Unit #2 Field

47-043- 70064



From Drillers Records/Plugging Records

* WVDEP OOG Internal Use Only
Rev. 6/14/16

(126)

AOR - Well Review Checklist

API Number: 47- 043 - 30294 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 5
Farm Name: TA Griffith
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2409
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 417,056 Northing: 4,230,657
Elevation: 280
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47043-30294

Well No. 5 T. A. Griffith — Farm 160 Acres
Lease No. 8022.5 Duval Township District Lincoln — County W. Va. State
United Fuel Drilling Company Contractor — Contractor
Drilling Commenced May 8, 1909 — Drilling Completed June 16 1909
N. S. 83 E. W. 75-6 Elevation

Rock Formation	Top	Bottom	Steel Line Measurement	Remarks
Slate and Sand Stone		60		
Sand	60	140		
Lime	140	200		
Slate	200	320		
Sand	320	390		
Slate and Shells	390	615		
Sand	615	700		
Slate	700	980		
Salt Sand	980	1640		
Slate	1640	1670		
Little Lime	1670	1710		
Penoil Cave	1710	1715		
Big Lime	1715	1919		
Sand	1919	1990		
Shells and Slate	1990	2135		
Slate	2135	2389		
Butea Sand	2389	2409		
Total Depth		2409		

Purchased 12-11-41 from Virginian Gasoline and Oil Company.

CASING RECORD AS TALLIED. NOT STEEL LINE MEASUREMENT.

	Put in Well		Pulled Out		Left in Well	
Size	Feet	In.	Feet	In.	Feet	In.
6 5/8"	1717				1717	
10" W.C	16				16	

Shot Date June 16th 1909
Amount 90 Quarts
Sand
Result
Packer Size
Depth Set

Production First 24 Hours ____ Bbls. Gas Test ____

Approved by E. B. South Superintendent

47-043-30294

FORM OG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

Mrs. M. A. Hill & T.A. Griffith Heirs (Coal not operated)
Madison, W. Va.
ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

Mrs. M. A. Hill & T.A. Griffith Heirs
LEASE OR PROPERTY OWNER
O. C. Chambers, Agent
Madison, W. Va.
ADDRESS

Frick-Reid Supply Corporation
NAME OF WELL OPERATOR
Drawer 2481, Tulsa, Okla.
COMPLETE ADDRESS
April 30, 1942
WELL AND LOCATION
Duval District
Lincoln County
Well No. Five
T. A. & M. A. Griffith Farm

STATE INSPECTOR SUPERVISING PLUGGING Calvin N. Hall

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

Clay Wade and James L. Kerns 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 Frick-Reid Supply Corp., well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 14th day of April, 1942, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD FORMATION	FILLING MATERIAL CONTENT	FROM	TO	PLUGS USED SIZE & KIND	CASING CSG PULLED	CASING CSG LEFT IN
Berea	Bridge	2409	2389			
	Clay	2389	2369			
	Plug	2369	2366	Wood 3' x 6¼"		
	Cement	2366	2356			
	Bridge	2020				
	Cement	2020	2010			
	Clay	2010	1740			
	Plug	1740	1737	Wood 3' x 6¼"		
Big lime	Cement	1737	1727			
Salt sand	Clay	1727	960		1603	114
	Cement	960	950			
	Plug	425	422	Wood 3' x 8¼"		
	Cement	422	415			
	Clay	415	Surface			

COAL SEAMS			
(NAME)	None		
(NAME)			
(NAME)			
(NAME)			

DESCRIPTION OF MONUMENT

Concrete Block 2'6" x 2' 0" x 1'6" High Inscribed "Frick-Reid Sup. Corp. T.A.&M.A. Griffith # 5, April 25, 1942".

and that the work of plugging and filling said well was completed on the 25th day of April, 1942.

And further deponents saith not.

Clay Wade
James L. Kerns

Sworn to and subscribed before me this 2 day of May, 1942.

E. J. Shepard J.P.
Notary Public.

My commission expires:

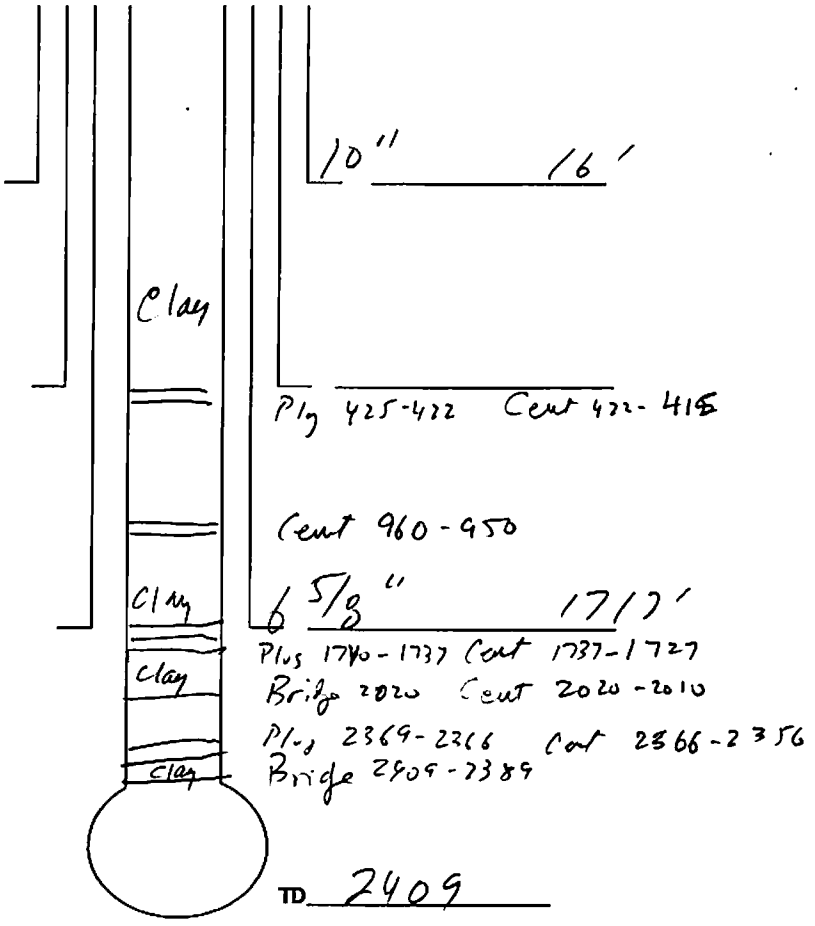
Permit No. IN-294.

ACCEPT FROSTED COVERLAY, CHARLESTON, W. VA.

TA Griffs 5

Griffithsville Unit #2 Field

47-043- 30294



2389

Berea

2409

From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
v. 6/14/16

(127)

AOR - Well Review Checklist

API Number: 47- 043 - Area Permit Number: 2R AP

Operator Name: H 6 Energy

Operator's Well #: 6

Farm Name: TA Griffith

Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐

Well Status: Active ☐ Abandoned ☐ Plugged ☒

TD of well:

Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐

Easting: 417,228 Northing: 4,230,731

Elevation: 289'

Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☐

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = 0

Bottom Hole Injection Pressure 0

Hydrostatic Pressure 0

Comments:

35 T38 NA

Reviewer Name: Signature:

Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

WVDEP OOG Internal Use Only
Rev. 6/14/16

(128)

AOR - Well Review Checklist

API Number: 47- 043 - Area Permit Number: 2R AP

Operator Name: H 6 Energy

Operator's Well #: 7

Farm Name: TP 6 HTA

Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐

Well Status: Active ☐ Abandoned ☐ Plugged ☒

TD of well:

Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐

Easting: 417,383 Northing: 4,230,849

Elevation: 306

Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐	
Date of Last MIT:	Passed?	No ☐	Yes ☐	
Open Hole Completion		No ☐	Yes ☒	
Well penetrates injection zone?		No ☐	Yes ☒	
Well perforated in injection zone?		No ☒	Yes ☐	
Cemented across injection zone?		No ☒	Yes ☐	
Packer immediately above injection zone (<100')?		No ☐	Yes ☐	No Packer ☐
		If No: Provide Depth:		
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒	

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**

Bottom Hole Injection Pressure **0**

Hydrostatic Pressure **0**

Comments:

35 + 38 NA

Reviewer Name: Signature:

Date Reviewed:

** Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

WVDEP OOG Internal Use Only
Rev. 6/14/16

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AOR - Well Review Checklist

API Number: 47- 043 - 30295 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 8
Farm Name: TA Griffith
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2547
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 417,031 Northing: 4,229,959
Elevation: 324
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-30295

Well No. 1 Tuncil Griffith Farm 160 Acres
Lease No. 10115 Duval Township District Lincoln County W. Va. State
United Fuel Drilling Company Contractor Contractor
Drilling Commenced Sept. 1 1909 Drilling Completed Oct. 16 1909
N. S. 13 E. W. 75-6 Elevation

Rock Formation	Top	Bottom	Steel Line Measurement	Remarks
Salt Sand	1160	1800		
Slate	1800	1810		
Little Lime	1810	1825		
Pencil Cave	1825	1840		
Big Lime	1840	2015		
Big Injun	2015	2100		
Slate & Shells	2100	2526		
Berea Sand	2526	2545		
Total Depth		2547		Pocket 2'

Purchased 12-11-41 from Virginian Gasoline & Oil Company.

CASING RECORD AS TALLIED. NOT STEEL LINE MEASUREMENT.

	Put in Well		Pulled Out		Left in Well	
Size	Feet	In.	Feet	In.	Feet	In.
6 5/8"	1852				1852	
8 1/4"	510					
10" Wood	16				16	

Shot Date October 15th 1909
Amount 90 Quarts
Sand
Result
Packer Size
Depth Set

Production First 24 Hours ____ Bbls. Gas Test ____

Approved by E. B. South Superintendent

47.043 - 30295

FORM OG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

Mrs M.A. Hill & T.A. Griffith Heirs (Coal not operated)
COAL OPERATOR OR OWNER
Madison, W. Va.
ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

Mrs. M.A. Hill & T.A. Griffith Heirs
LEASE OR PROPERTY OWNER
O. C. Chambers, Agent
Madison, W. Va.
ADDRESS

Frick-Reid Supply Corporation
NAME OF WELL OPERATOR
Drawer 2481, Tulsa, Okla.
COMPLETE ADDRESS

April 30, 1942
WELL AND LOCATION

Duval District

Lincoln County

Well No. Eight

T.A. & M. A. Griffith Farm

STATE INSPECTOR SUPERVISING PLUGGING Calvin N. Hall

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

Arlie Satterfield and Clyde Satterfield 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 Frick-Reid Supply Corp. well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 8th day of April, 1942, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD		FILLING MATERIAL		PLUGS USED	CASING	
FORMATION	CONTENT	FROM	TO	SIZE & KIND	CSG PULLED	CSG LEFT IN
Berea	Bridge	2547	2526			
	Clay	2526	2506			
	Wood plug	2506	2503	Wood 3' x 5-3/4"		
	Cement	2503	2493			
	Bridge	2130				
	Clay	2130	1875			
	Wood plug	1875	1872	Wood 3' x 6½"		
	Cement	1872	1862			
					716	1136
	Wood plug	702		Wood 3' x 6-1/8"		
	Cement	702	687	Set in top of csg left in hole		
	Wood plug	435	433	Wood 3' x 8½"		
	Cement	433	428			
	Clay	428	Surface			
COAL SEAMS	None			DESCRIPTION OF MONUMENT		
(NAME)				Concrete Block 2'6" x 2'0"		
(NAME)				x 1' 6" High "Inscribed Frick-		
(NAME)				Reid Sup. Corp. T.A.&M.A. Griff-		
(NAME)				ith # 8. April 30. 1942.		

and that the work of plugging and filling said well was completed on the 30th day of April, 1942.

And further deponents saith not.

Arlie Satterfield
Clyde Satterfield

Sworn to and subscribed before me this 2c day of May, 1942.

F. J. Shepard J. P.
Notary Public.

My commission expires:

Permit No. LIN-295

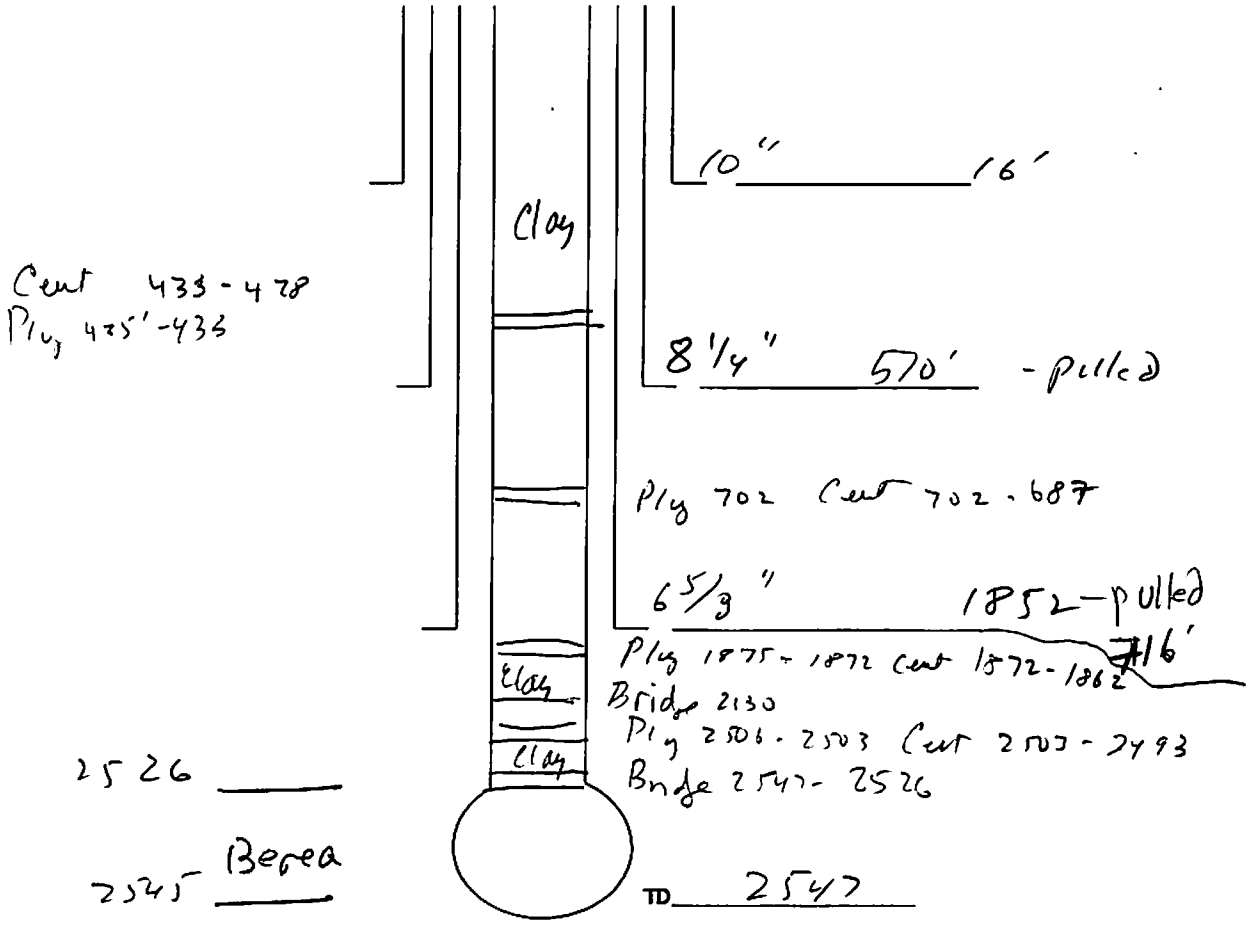
JUN 1942 DEPARTMENT OF MINES

SOCIETY PRINTING COMPANY, CHARLESTON, W. VA.

TA Griffiths 8

Griffithsville Unit #2 Field

47-043- 30295



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

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AOR - Well Review Checklist

API Number: 47- 043 - 30284 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 9
Farm Name: TA 6, TR 7h.
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2412
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 417,481 Northing: 4,230,661
Elevation: 283
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-30284

Well No. 9 Tuncil Griffith Farm Acres
Lease No. 80225 Duval Township District Lincoln County W. Va. State
United Fuel Drilling Company Contractor Contractor
Drilling Commenced Dec 11 1909 Drilling Completed Jan 25 1910
N. S. 83 E. W. 75-6 Elevation

Rock Formation	Top	Bottom	Steel Line Measurement	Remarks
Sand	15	110		
Slate	110	375		Reduced Hole 475'
Sand	375	610		
Slate	610	800		
Sand	800	900		
Slate	900	990		
Salt Sand	990	1671		Hole full Water 1090
Slate	1671	1676		
Little Lime	1676	1714		
Pencil Cave	1714	1719		
Big Lime	1719	1899		
Big Injun	1899	1969		
Slate and Shells	1969	2020		
Squaw Sand	2020	2100		
Slate and Shells	2100	2390		
Berea Sand	2390	2412		

Purchased 12-11-41 from Virginian Gasoline & Oil Company

CASING RECORD AS TALLIED. NOT STEEL LINE MEASUREMENT.

	Put in Well		Pulled Out		Left in Well	
Size	Feet	In.	Feet	In.	Feet	In.
6 5/8"	1722				1722	
10" Wood	16				16	

Shot Date January 25, 1910
Amount 90 Quarts
Sand
Result
Packer Size
Depth Set

Production First 24 Hours Bbls. Gas Test

Approved by E. B. South Superintendent

47-043-30284

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

Mrs M.A. Hill & T.A. Griffith Heirs — COAL OPERATOR OR OWNER
(Coal not operated)
Madison, W. Va — Address

COAL OPERATOR OR OWNER

ADDRESS

Mrs. M.A. Hill & T.A. Griffith Heirs — LEASE OR PROPERTY OWNER
O. C. Chambers, Agent.
Madison, W. Va. — Address

Frick-Reid Supply Corporation — NAME OF WELL OPERATOR
Drawer 2481, Tulsa, Okla. — COMPLETE ADDRESS
April 6, 1942 — WELL AND LOCATION
Duval District
Lincoln County
Well No. Nine
T. A. & M. A. Griffith Farm

STATE INSPECTOR SUPERVISING PLUGGING Calvin N. Hall

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

Clay Wade and James L. Kerns 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 Frick-Reid Supply Corp. well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 20th day of March, 1942, and that the well was plugged and filled in the following manner:

SAND OR LIME RECORD FORMATION	FILLING MATERIAL CONTENT	FROM	TO	PLUGS USED SIZE & KIND	CASING CSG PULLED	CSG LEFT IN
Berea	Bridge	2412	2390			
	Clay	2390	2370			
	Cement	2370	2360			
Squaw	Clay	2360	2000			
	Cement	2000	1990			
Big Injun	Clay	1990	1747		1665	57
Big Lime& Little	Cement	1747	1737			
Lime	Clay	1737	970			
Salt sand	Cement	970	960			
	Wood plug	475	472	Wood 3' x 8 3/4"		
	Cement	472	465			
	Clay	465	Sur			

COAL SEAMS None

(NAME)
(NAME)
(NAME)
(NAME)

DESCRIPTION OF MONUMENT
Concrete Block 2'6" x 2'0" x 1'6" High Inscribed "Frick-Reid Sup. Corp. T.A. & M. A. Griffith # 9. April. 1. 1942.

and that the work of plugging and filling said well was completed on the 1st day of April, 1942.

And further deponents saith not.

Clay Wade
James L. Kerns

Sworn to and subscribed before me this 22 day of May, 1942

F. J. Lyard Jr.
Notary Public

My commission expires:

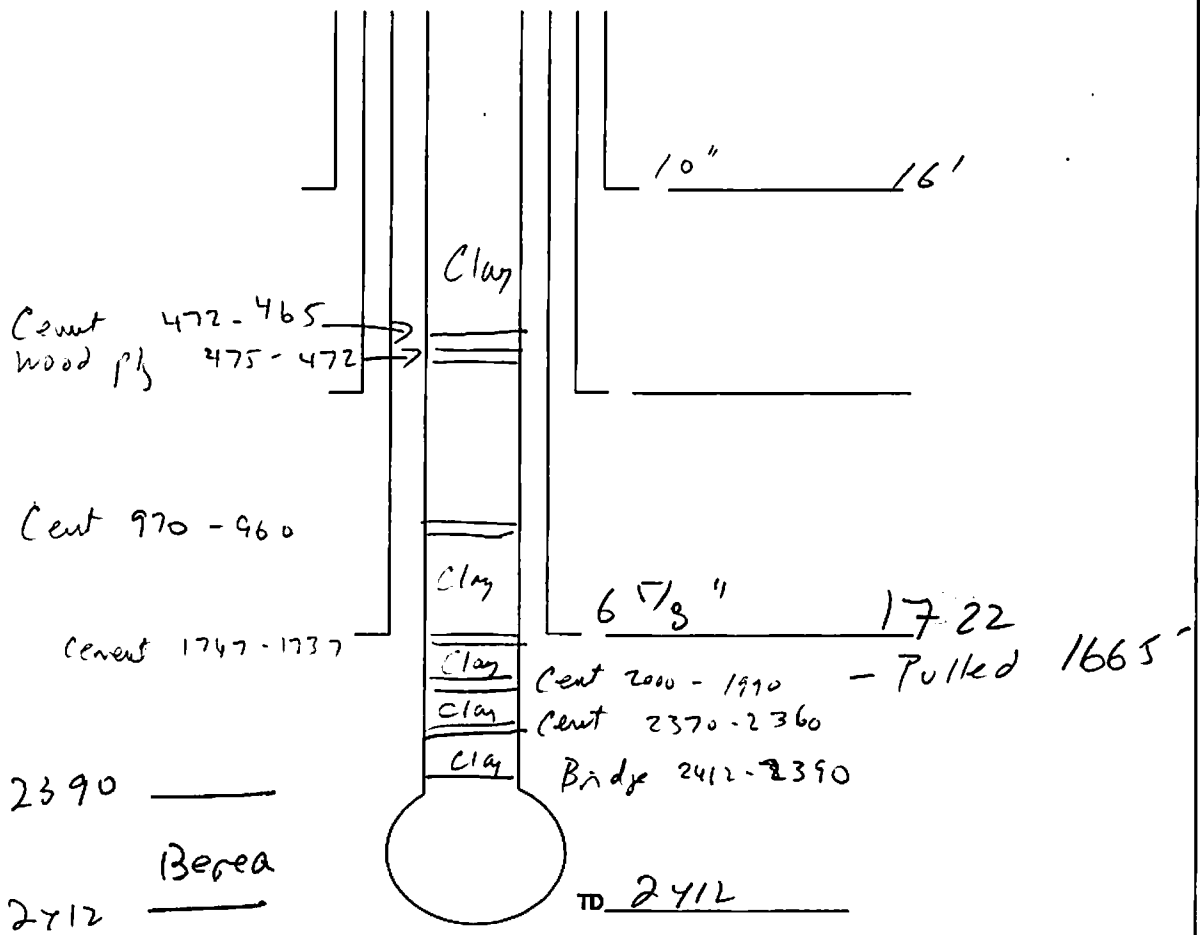
Permit No. Lin-264

ACME FORMS COMPANY, CHARLESTON, W. VA.

T A Goth 9

Griffithsville Unit #2 Field

47-043- 30284



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

(131)

AOR - Well Review Checklist

API Number: 47- 043 - 30601 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 10
Farm Name: TA Griffith
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2246
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 417,570 Northing: 4,230,508
Elevation: 244
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:
Date Reviewed: /

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-30601

Well No. 10 Tuncil Griffith — Farm 160 Acres

Lease No. 9215 — Duval Township District — Lincoln County — W. Va. State

United Fuel Drilling Company Contractor — Contractor

Drilling Commenced Oct. 25 1909 — Drilling Completed Dec. 2 1909

N. S. 83 E. W. 75-6 Elevation

Rock Formation	Top	Bottom	Steel Line Measurement	Remarks
Sand	30	180		
Slate	180	250		
Sand	250	290		
Coal	290	295		
Slate	295	400		
Sand	400	600		
Slate	600	795		
Salt Sand	795	1500		
Slate	1500	1510		
Little Lime	1510	1540		
Slate	1540	1545		
Big Lime	1545	1755		
Big Injun	1755	1835		
Slate	1835	1890		
Squaw Sand	1890	1980		
Slate	1980	2060		
Shells	2060	2080		
Slate	2080	2140		
Shells	2140	2206		
Black Slate	2206	2226		
Berea Sand	2226	2246		
Purchased 12-11-11 from Virginian Gasoline Red Oil Company.				

CASING RECORD AS TALLIED. NOT STEEL LINE MEASUREMENT.

Size	Put in Well Feet	In.	Pulled Out Feet	In.	Left in Well Feet	In.
6 5/8"	1549				1549	
8 1/4"	350				43	
13"	16				16	

Shot Date December 3, 1909

Amount 85 Quarts

Sand

Result

Packer Size

Depth Set

Production First 24 Hours.....Bbls. Gas Test.....

Approved by E. B. South Superintendent

FORM OG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

47-043-03061

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE. ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER
ADDRESS
COAL OPERATOR OR OWNER
ADDRESS
LEASE OR PROPERTY OWNER
ADDRESS

NAME OF WELL OPERATOR: United Fuel Gas Company
COMPLETE ADDRESS: Charleston, W. Va.
WELL AND LOCATION: April 21, 19 49
District: Duval
County: Lincoln
Well No. 10
Farm: T. A. Griffith E.M.A. 1

STATE INSPECTOR SUPERVISING PLUGGING

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

W. C. Pack and Frank Pack 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 R. H. Adkins, well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 1 day of April, 1949, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD — FORMATION	FILLING MATERIAL — CONTENT	FROM	TO	PLUGS USED — SIZE & KIND	CASING — CSG PULLED	CSG LEFT IN
SET A PERMANENT BRIDGE AT 2206' - 20' above Berea Sand. 2 sacks neat cement and 5' crushed stone on bridge. Filled with clay to 2100' neat cement 2100' - 2090'.						
SET A PERMANENT BRIDGE at 1865' - 30' below Big Injun. 2 sacks neat cement and 5' crushed stone on bridge. Filled with red clay and other nonporous material to 1550' - 30' below 6-5/8" casing. Neat Cement 1550' - 1546'. 5' crushed stone on cement plug - sealing hole completely below 6-5/8" casing.						
PULLED CASING AS BALANCE OF HOLE WAS FILLED AND PLUGGED. Filled with clay to 775' - 20' above Salt Sands. Neat Cement 775' - 765' -						
SET A PERMANENT BRIDGE AT 325' - 30' below coal. Neat Cement 325' - 270' - 20' above Coal. Filled with clay to surface.						
Erected marker such as is described in Rule 18, 1931 Regulations						

COAL SEAMS
(NAME)
(NAME)
(NAME)
(NAME)

DESCRIPTION OF MONUMENT
U.F.GAS Co.
T. A. Griffith Well # 10
Date of Abandonment

and that the work of plugging and filling said well was completed on the 16 day of April, 1949.

And further deponents saith not.

W. C. Pack
Frank Pack

Sworn to and subscribed before me this 19 day of April, 1949.

Notary Public.

My commission expires: April 1, 1957

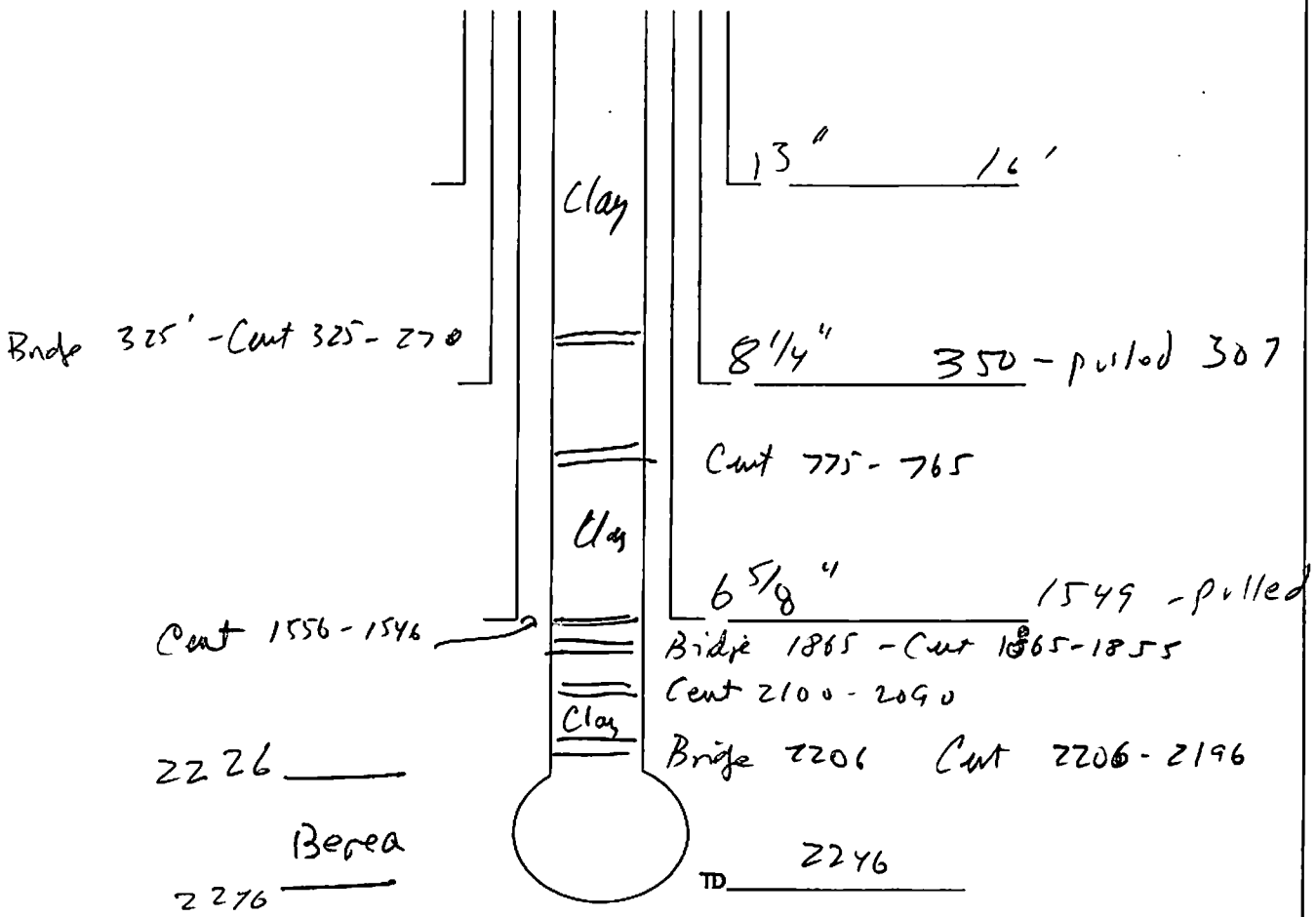
Permit No. L-1061

(71)

TA Gothic 10

Griffithsville Unit #2 Field

47-043- 30601



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

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AOR - Well Review Checklist

API Number: 47- 043 - Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 11
Farm Name: T A Griffith
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well:
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 417,407 Northing: 4,230,504
Elevation: 222
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☐

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

35 T38 NA

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

WVDEP OOG Internal Use Only
Rev. 6/14/16

133

AOR - Well Review Checklist

API Number: 47- 043 - 30300 Area Permit Number: 2R AP

Operator Name: H 6 Energy

Operator's Well #: 12

Farm Name: TA Griffith

Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐

Well Status: Active ☐ Abandoned ☐ Plugged ☒

TD of well: 2420

Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐

Easting: 417,242 Northing: 4,229,936

Elevation: 789

Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT: _____	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**

Bottom Hole Injection Pressure **0**

Hydrostatic Pressure **0**

Comments:

Reviewer Name: _____ Signature: _____

Date Reviewed: _____

** Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

WELL RECORD

47-043-30300

Permit No. Lin-300

Oil or Gas Well Oil Well (KIND)

Company Frick Reid Supply Corporation
Address Drawer 2481, Tulsa, Okla.
Farm T.A.& M.A. Griffith Acres 160
Location (waters) Porter's Fork of Mud River
Well No. Twelve (12) Elev. 943
District Duval County Lincoln
The surface of tract is owned in fee by J. W. Stickler
Address Yawkey, W. Va.
Mineral rights are owned by Mrs. M.A. Hill and T.A. Griffith Heirs Address Madison, W. Va.
Drilling commenced October 26, 1909
Drilling completed December 18, 1909
Date Shot 12-22-1909 From 2400 To 2420
With 80 Qts. Nitro-glycerine
Open Flow /10ths Water in Inch
/10ths Merc. in Inch
Volume Cu. Ft.
Rock Pressure lbs. hrs.
Oil bbls., 1st 24 hrs.
Fresh water feet feet
Salt water 1070 feet feet

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Packer
16			
13			Size of
10 Wood	16'	16'	
8¼	1734'	1734'	Depth set
6⅝			
5 3/16			Perf. top
3		2420'	Perf. bottom
2			Perf. top
Liners Used			Perf. bottom

CASING CEMENTED SIZE No. Ft. Date

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

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks
			0'	50'			
Slate			50	150			430' of 10" hole
Sand			150	430			
Slate & sand			430	600			
Sand			600	675			
Slate			675	725			
Lime			725	800			
Shells & slate			800	875			
Sand			875	960			
Slate			960	1610	Salt water	1070	
Salt sand			1610	1625			
Slate			1625	1640			
Red rock			1640	1650			
White slate			1650	1665			
Maxon sand			1665	1685			
Black slate			1685	1720			
Little lime			1720	1734	1734' - 1 5/8"		
Slate			1734	1910			
Big lime			1910	1970			
Big Injun			1970	2050			
Slate			2050	2095			
Squaw sand			2095	2295			
White slate			2295	2400			
Black slate			2400	2420			
Berea sand							



FORM OG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

47-043-30300

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

Mrs. M. A. Hill & T.A. Griffith Heirs, O. C. Chambers, Agent,
NAME OF COAL OPERATOR OR OWNER
Madison, W. Va.
ADDRESS

(Coal not operated)
COAL OPERATOR OR OWNER

ADDRESS

Mrs. M. A. Hill & T.A. Griffith Heirs, O. C. Chambers, Agent,
NAME OF COAL OPERATOR OR OWNER
Madison, W.Va.
ADDRESS

Frick-Reid Supply Corporation
NAME OF WELL OPERATOR
Drawer 2481, Tulsa, Okla.
COMPLETE ADDRESS

June 15, 1942
WELL AND LOCATION

Duval District

Lincoln County

Well No. Twelve

T. A. & M. A. Griffith Farm

STATE INSPECTOR SUPERVISING PLUGGING Calvin N. Hall

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

Arlie Satterfield and Clyde Satterfield 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 Frick-Reid Supply Corp., well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 29th day of May, 1942, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD	FILLING MATERIAL			PLUGS USED	CASING	
FORMATION	CONTENT	FROM	TO	SIZE & KIND	CSG PULLED	CSG LEFT IN
	Bridge	2420	2380			
Berea	Clay	2380	2300			
	Plug	2300	2297	Wood 3'X6 1/8"		
	Cement	2297	2287			
	Bridge	2000				
	Cement	2000	1990			
Big Injun	Clay	1990	1760			
	Plug	1760	1757	Wood 3'x6 1/8"		
Big Lime	Cement	1757	1747		1734	None
	Clay	1747	940			
Salt Sand	Cement	940	930			
	Plug	460	457	Wood 3'x8¼"		
	Cement	457	450			
	Clay	450	Surface			

COAL SEAMS	DESCRIPTION OF MONUMENT
(NAME)	8¼"Csg. filled with concrete 30" high marked "Frick-Reid Supply Corp. # 12 T. A. & M. A. Griffith Abnd. June 10,1942"
(NAME)	
(NAME)	
(NAME)	

and that the work of plugging and filling said well was completed on the 10th day of June, 1942.

And further deponents saith not.

Arlie Satterfield
Clyde Satterfield

Sworn to and subscribed before me this 6 day of Aug, 1942

F. J. Shepard, N. P.
Notary Public

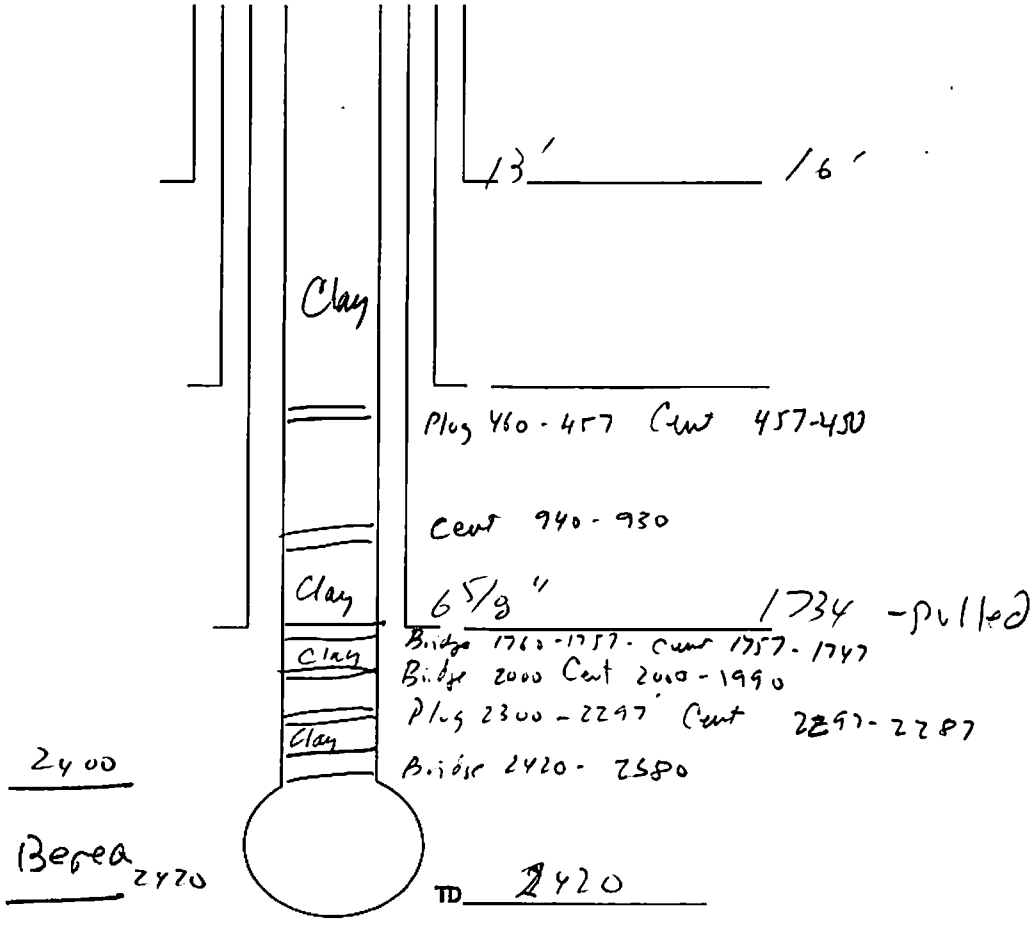
My commission expires:

Permit No. LIN-300

TA Griffith 12

Griffithsville Unit #2 Field

47-043- 30300



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
6/14/16

(184)

AOR - Well Review Checklist

API Number: 47- 043 - Area Permit Number: 2R AP

Operator Name: H 6 Energy

Operator's Well #: 13

Farm Name: TA Griffith

Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐

Well Status: Active ☐ Abandoned ☐ Plugged ☒

TD of well: 2435

Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐

Easting: 417,358 Northing: 4,230,169

Elevation: 292

Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☐

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = 0

Bottom Hole Injection Pressure 0

Hydrostatic Pressure 0

Comments:

38 + APT

✓

NA

Reviewer Name: Signature:

Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

Well No. 13 T. A. & M. A. Griffith Farm 160 Acres
Lease No. 80225 Duval Lincoln County W. Va. State
Pratt Drilling Company Contractor Contractor
Drilling Commenced Jan. 3 1910 Drilling Completed Feb 22 1910
N. S. 83 E. W. 75-4 Elevation

Rock Formation	Top	Bottom	Steel Line Measurement	Remarks
Mud	0	80		
Slate	80	150		
Sand	150	308		
Coal	300	303		
Sand	303	360		Water 303 Ft.
Black Slate	360	440		
Sand	440	460		Water at 440 Ft.
Brown Slate	460	540		
Lime	540	580		
Sand	580	680		
Slate	680	980		
Sand	980	1000		
Salt Sand	1000	1700		Salt Water 1090 Ft.
Little Lime	1700	1735		
Pencil Cave	1735	1741		
Big Lime	1741	1926		Gas in Lime 1886 Ft.
Injun Sand	1926	1986		
White Slate	1986	2146		
Shells	2146	2206		
Brown Slate	2206	2350		
White Slate	2350	2397		
Black Slate	2397	2417	Purchased	12-11-41 from Virginian
Berea Sand	2417	2435	Gasoline & Oil Company.	

CASING RECORD AS TALLIED. NOT STEEL LINE MEASUREMENT.

	Put in Well		Pulled Out		Left in Well	
Size	Feet	In.	Feet	In.	Feet	In.
6 5/8"	1741		1741			
8 1/4"	460					
10" Wood	16		16			

Shot Date February 24. 1910
Amount 80 Quarts
Sand
Result
Packer Size
Depth Set

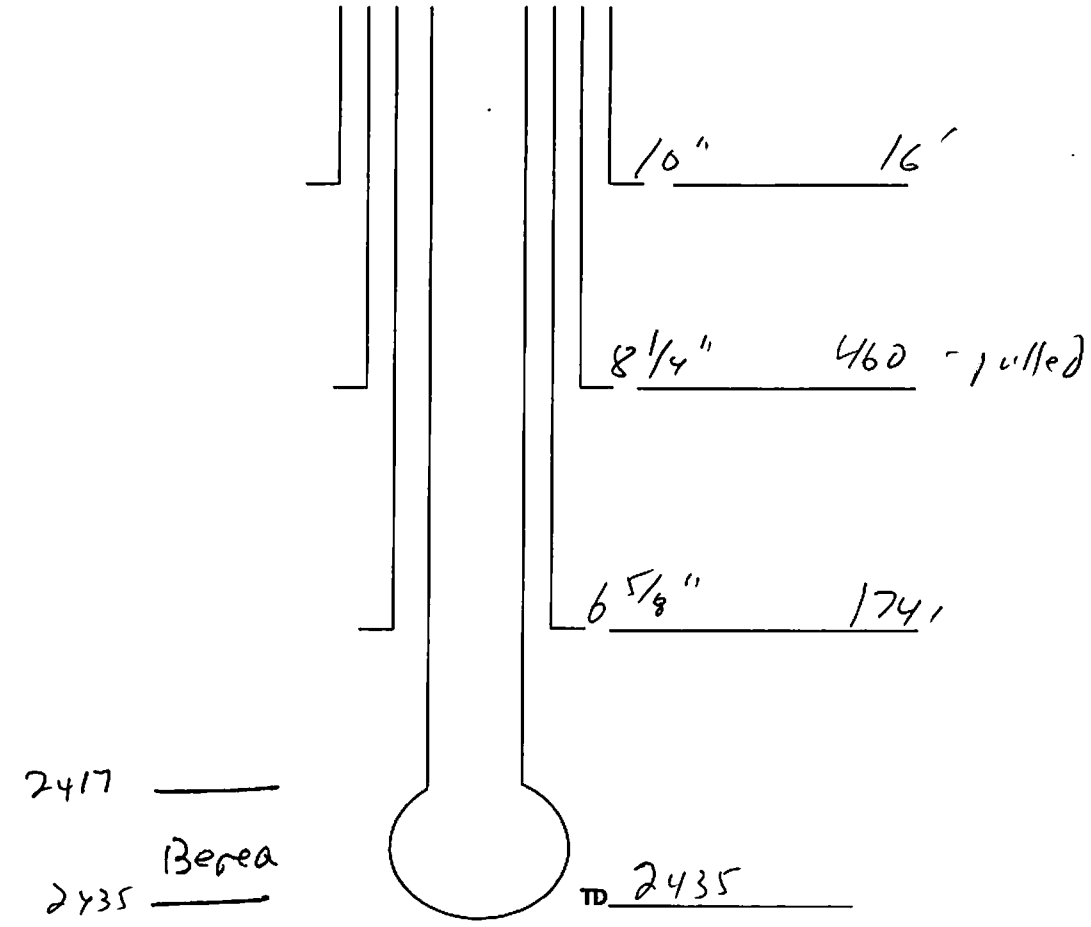
Production First 24 Hours ..... Bbls. Gas Test .....

Approved by E. B. South Superintendent

TA 6-thirty 13

Griffithsville Unit #2 Field

47-043-



From Drillers Records/Plugging Records

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WVDEP OOG Internal Use Only
Rev. 6/14/16

AOR - Well Review Checklist

API Number: 47- 043 - Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 14
Farm Name: TA Griffith
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2327
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 417,350 Northing: 4,230,339
Elevation: 260
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐	
Date of Last MIT:	Passed?	No ☐	Yes ☐	
Open Hole Completion		No ☐	Yes ☒	
Well penetrates injection zone?		No ☐	Yes ☒	
Well perforated in injection zone?		No ☒	Yes ☐	
Cemented across injection zone?		No ☒	Yes ☐	
Packer immediately above injection zone (<100')?		No ☐	Yes ☐	No Packer ☐
		If No: Provide Depth:		
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒	

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = 0
Bottom Hole Injection Pressure 0
Hydrostatic Pressure 0

Comments:

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

Well No. 14 Tyncil Griffith Farm 160 Acres
Lease No. 80225 Duval Township District Lincoln County W. Va. State
Pratt Drilling Company Contractor Contractor
Drilling Commenced Jan. 31 1910 Drilling Completed March 9 1910
N. S. 83 E. W. 75-6 Elevation

Rock Formation	Top	Bottom	Steel Line Measurement	Remarks
Coal	200	205		
Sand	205	300		
Slate	300	400		
Sand	400	460		
Slate	460	575		
Sand	575	700		
Slate	700	885		
Salt Sand	885	1586		
Little Lime	1586	1623		
Pencil Cave	1623	1628		
Big Lime	1628	1808		
Red Rock	1808	1878		
Slate	1878	1928		
Squaw Sand	1928	2000		
Slate and Shells	2000	2290		
Black Slate	2290	2307		
Berea Sand	2307	2325		
Bottom Hole		2327		2 Ft. Pocket
Purchased 12-11-41 from Virginian Gasoline and Oil Company				

CASING RECORD AS TALLIED. NOT STEEL LINE MEASUREMENT.

	Put in Well		Pulled Out		Left in Well	
Size	Feet	In.	Feet	In.	Feet	In.
6 5/8"	1631				1631	
8 1/4"	400					
10" Wood	16				16	

Shot Date March 11, 1910
Amount 80 Quarts
Sand
Result
Packer Size
Depth Set

Production First 24 Hours _____ Bbls. Gas Test _____

Approved by E B South Superintendent

FORM GG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

LEASE OR PROPERTY OWNER

ADDRESS

United Fuel Gas Company
NAME OF WELL OPERATOR
Charleston, W. Va.
COMPLETE ADDRESS
April 12, 1949
WELL AND LOCATION
Duval District
Lincoln County
Well No. 14
T. A. Griffith (T.M.A.) Farm
STATE INSPECTOR SUPERVISING PLUGGING D. E. Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

W. C. Peck and W. C. Woodall 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 R. H. Adkins, well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 23 day of March, 1949, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD		FILLING MATERIAL		PLUGS USED	CASING	
FORMATION	CONTENT	FROM	TO	SIZE & KIND	CSG PULLED	CSG LEFT IN
Set a Permanent Bridge 2287' - 20' above Berea Sand. 2 sacks neat Cement and 5' crushed stone on bridge. Filled with clay to 2187' Neat Cement 2187' - 2177'.						
Set a Permanent Bridge at 1908'. 2 sacks neat cement and 5' crushed stone on bridge. Filled with clay to 1608' - 20' above Big Lime. Neat cement 1608' - 1598'. 5' Crushed stone on cement plug.						
Continued filling with clay to 865' - 20' above Salt Sand Neat cement 865' - 855'.						
Set a Permanent Bridge at 235' - 30' below coal Neat Cement 235' - 180' - 20' above Coal. Filled with clay to surface.						
Erected marker such as is described in Rule 28, 1931 Regulations (18"x18"x30")						
COAL SEAMS				DESCRIPTION OF MONUMENT		
(NAME)				U. F. G. CO.		
(NAME)				T.A.Griffith # 14		
(NAME)				Date of abandonment		
(NAME)						

and that the work of plugging and filling said well was completed on the 30 day of March, 1949.

And further deponents saith not. W. C. Peck, Wm. C. Woodall

Sworn to and subscribed before me this 12 day of April, 1949.

My commission expires: April 1, 1957

Notary Public.

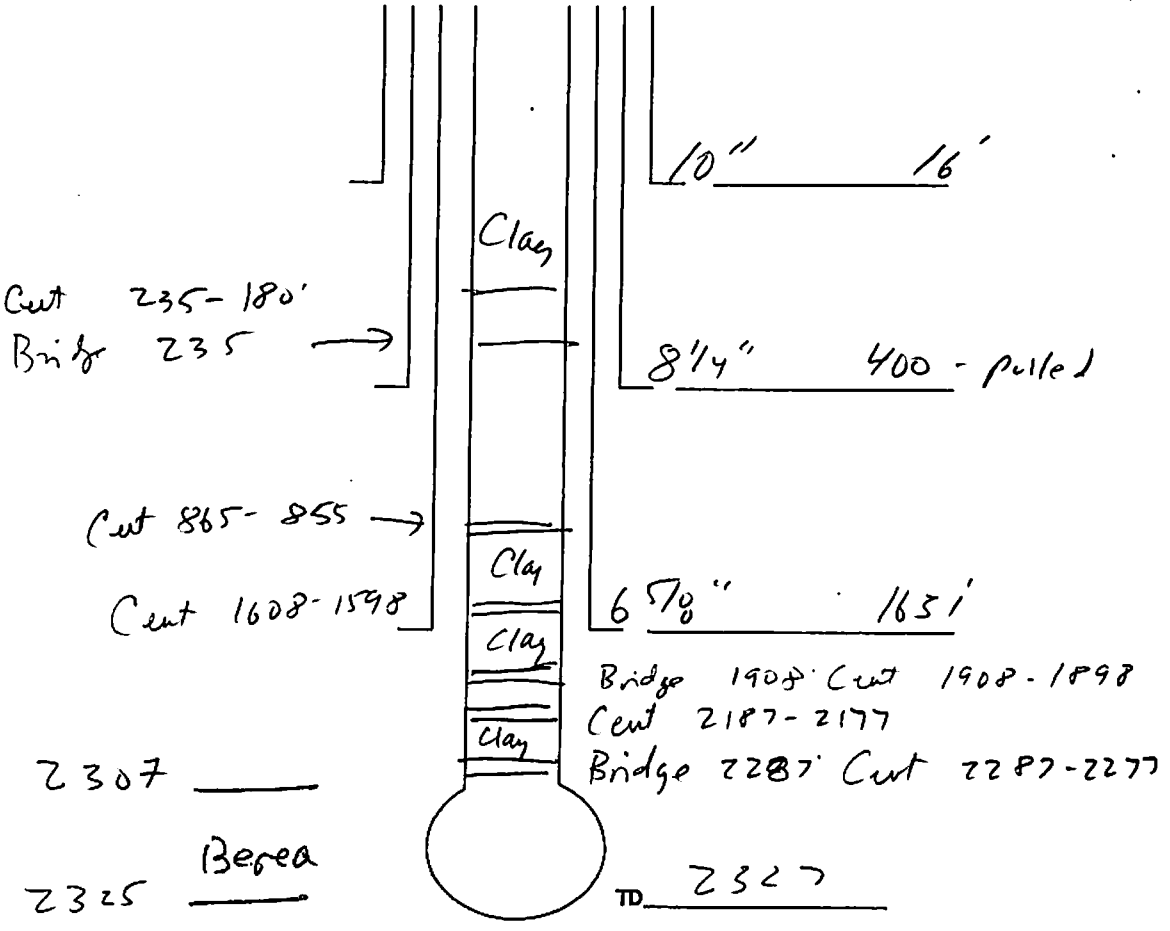
Permit No. LIN-612

(72)

TA Griffith 14

Griffithsville Unit #2 Field

47-043-



From Drillers Records/Plugging Records

no reference to casing pulled. or WR 3

WVDEP OOG Internal Use Only
Rev. 6/14/16

436

AOR - Well Review Checklist

API Number: 47- 043 - Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 15
Farm Name: TA 6-Ash
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2557
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 417,414 Northing: 4,229,969
Elevation: 345
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☐

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

38 NA

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

Well No. 15 T. A. Griffith — Farm 160 Acres

Lease No. 80125 Duval Township District Lincoln County W. Va. State

Pratt Drilling Company Contractor — Contractor

Drilling Commenced March 4 1910 Drilling Completed April 20 1910

N. S. 93 E. W. 75-6 Elevation

Rock Formation	Top	Bottom	Steel Line Measurement	Remarks
Mud	0	75		
Sand	75	175		
Black Slate	175	235		
Sand	235	635		
Coal	635	637		Water at 635 Ft
Black Slate	637	737		
Sand	737	887		
Slate	887	1000		
Sand	1000	1190		
Lime	1190	1200		
Salt Sand	1200	1760		Salt Water at 1250 Ft.
Slate	1760	1820		
Little Lime	1820	1860		
Pencil Cave	1860	1865		
Big Lime	1865	2050		
Big Injun	2050	2110		
Shells and Slate	2110	2265		
Black Slate	2265	2515		
Brown Slate	2515	2535		
Berea Sand	2535	2555		
		2558		3 Ft. Pocket

Purchased 12-11-41 from Virginian Gasoline and Oil Company

CASING RECORD AS TALLIED. NOT STEEL LINE MEASUREMENT.

	Put in Well		Pulled Out		Left in Well	
Size	Feet	In.	Feet	In.	Feet	In.
6 5/8"	1865				1865	
Wood Cond.	16				16	

Shot Date April 21, 1910

Amount 90 Quarts

Sand

Result

Packer Size

Depth Set

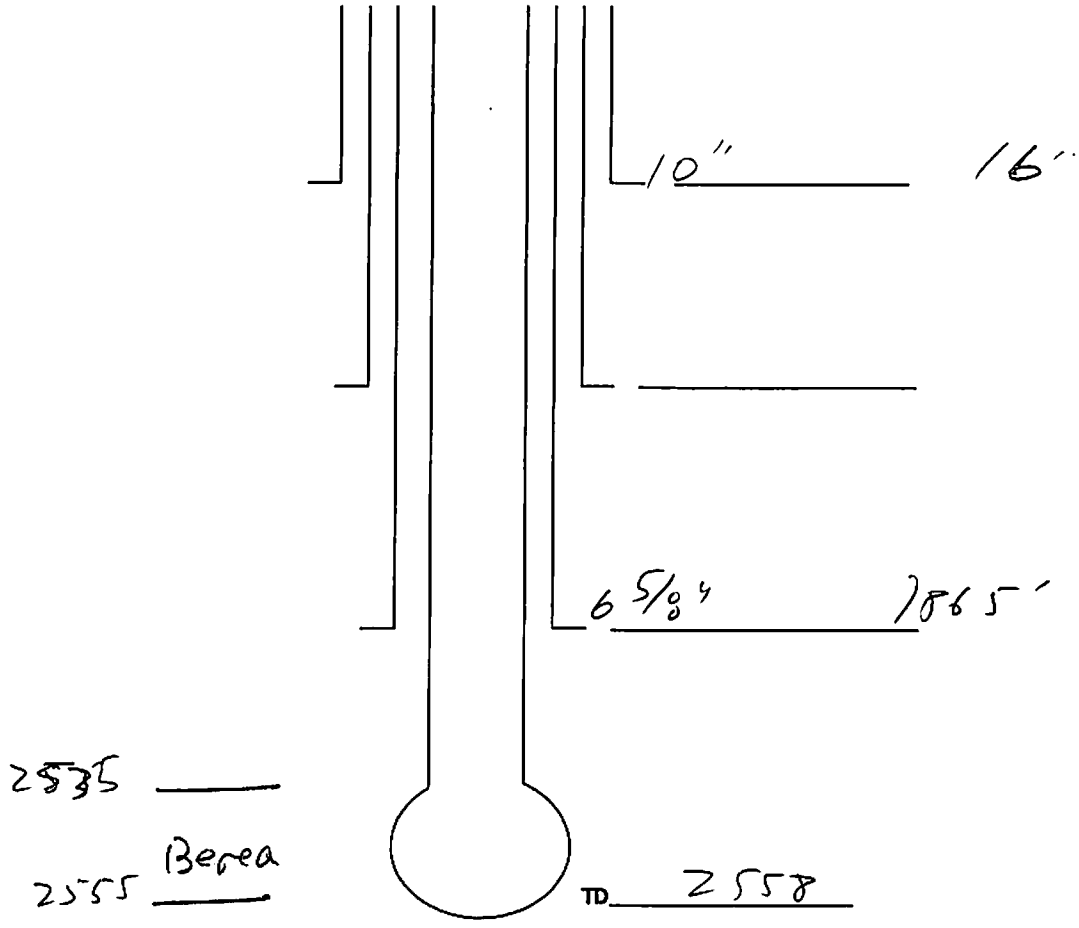
Production First 24 Hours ____ Bbls. Gas Test ____

Approved by E. B. South Superintendent

TA Gauley 15

Griffithsville Unit #2 Field

47-043-



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

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AOR - Well Review Checklist

API Number: 47- 043 - Area Permit Number: 2R AP

Operator Name: H 6 Energy

Operator's Well #: 16

Farm Name: TA Griffith

Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐

Well Status: Active ☐ Abandoned ☐ Plugged ☒

TD of well: 2375

Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐

Easting: 417,078 Northing: 4,230,154

Elevation: 277

Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐	
Date of Last MIT:	Passed?	No ☐	Yes ☐	
Open Hole Completion		No ☐	Yes ☒	
Well penetrates injection zone?		No ☐	Yes ☒	
Well perforated in injection zone?		No ☒	Yes ☐	
Cemented across injection zone?		No ☒	Yes ☐	
Packer immediately above injection zone (<100')?		No ☐	Yes ☐	No Packer ☐
		If No: Provide Depth:		
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☐	

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**

Bottom Hole Injection Pressure **0**

Hydrostatic Pressure **0**

Comments:

38 AA

Reviewer Name: Signature:

Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

Well No. 16 T. D. Griffith Farm 160 Acres
Lease No. 80225 Duval Township District Lincoln County W. Va. State
Pratt Drilling Company Contractor Contractor
Drilling Commenced April 26 1910 Drilling Completed June 17 1910
N. S. 83 E. W. 76-7 Elevation

Rock Formation	Top	Bottom	Steel Line Measurement	Remarks
Slate	0	60		
Sand	60	115		
Slate	115	180		
Lime	180	225		
Sand	225	285		
Slate	285	375		
Sand	375	440		
Slate	440	530		
Lime	530	580		
Sand	580	625		
Slate	625	715		
Sand	715	825		
Slate	825	1000		
Salt Sand	1000	1533		Salt Water 1050
Slate	1533	1573		
Red Rock	1573	1603		
Maxton Sand	1603	1633		
Little Lime	1633	1675		
Pencil Cave	1675	1680		
Big Lime	1680	1870		
Big Injun	1870	1935		
Slate	1935	2010		
	continued next above			

CASING RECORD AS TALLIED. NOT STEEL LINE MEASUREMENT.

	Put in Well		Pulled Out		Left in Well		
Size	Feet	In.	Feet	In.	Feet	In.	Shot Date Amount Sand Result
							Packer Size Depth Set

Production First 24 Hours ..... Bbls. Gas Test .....

Approved by ..... Superintendent

Well No. 16 T. A Griffith Farm 160 Acres
Lease No. 8022.5 Duval Township or District Lincoln County W. Va. State
Pratt Drilling Company Contractor Contractor
Drilling Commenced April 26 1910 Drilling Completed June 17 1910
N. S. 53 E. W. 75-4 Elevation

Rock Formation	Top	Bottom	Steel Line Measurement	Remarks
Lime and Shells	2010	2125		
White Slate	2125	2338		
Brown Slate	2338	2358		
Berea Sand	2358	2375		

Purchased 12-11-41 from Virginian Gasoline and Oil Company

CASING RECORD AS TALLIED. NOT STEEL LINE MEASUREMENT.

	Put in Well		Pulled Out		Left in Well	
Size	Feet	In.	Feet	In.	Feet	In.
6 5/8"	1694				1694	
Wood Cond.	16				16	

Shot Date June 19. 1910
Amount 80 Quarts
Sand
Result
Packer Size
Depth Set

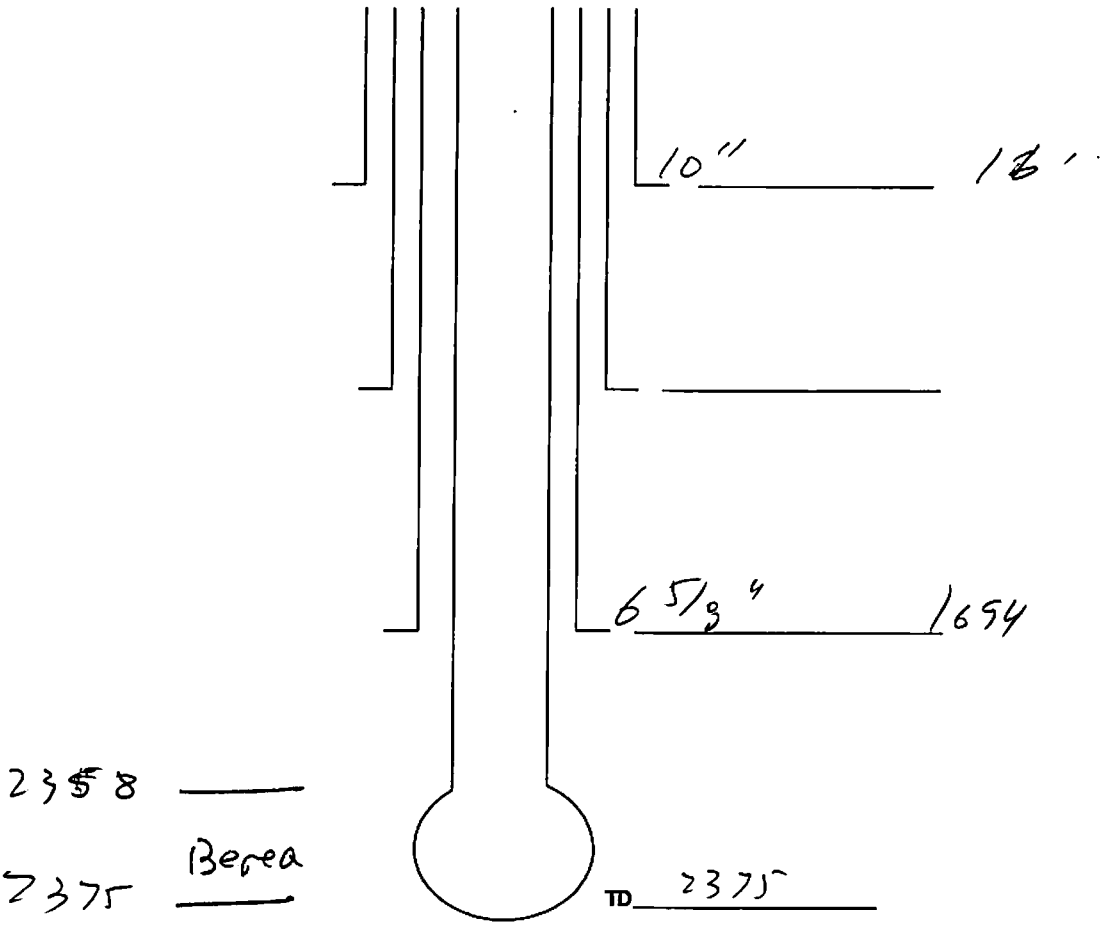
Production First 24 Hours Bbls. Gas Test

Approved by E B South Superintendent

TA 6 mth/12 16

Griffithsville Unit #2 Field

47-043-



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
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AOR - Well Review Checklist

API Number: 47- 043 - 30612 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 17
Farm Name: TA Griffith
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2202
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 417,173 Northing: 4,230,477
Elevation: 233
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☐

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

need WR 38 - NA

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-30612

Well No. 17 T. A. Griffith Farm 160 Acres
Lease No. 80225 Duval Township District Lincoln County W. Va. State
Contractor Contractor
Drilling Commenced 19 Drilling Completed 19
N. S. 83 E. W. 75-6 Elevation

Rock Formation	Top	Bottom	Steel Line Measurement	Remarks
Coal	160	165		
Slate	165	180		
Sand	180	210		
Slate	210	250		
Sand	250	325		
Slate	325	380		
Sand	380	400		
Slate	400	490		
Sand	490	550		
Slate	550	610		
Sand	610	665		
Slate	665	730		
Sand	730	760		
Slate	760	860		
Salt Sand	860	1460		Salt Water 890 Ft.
Little Lime	1460	1490		
Pencil Cave	1490	1496		
Big Lime	1496	1686		
Injun Sand	1686	1746		
Slate	1746	1860		
Squaw Sand	1860	1920		
Slate	1920	2179½		Purchased 12-11-41 from Virginian Gasoline & Oil Co.
Berea Sand	2179½	2202½		

CASING RECORD AS TALLIED. NOT STEEL LINE MEASUREMENT.

	Put in Well		Pulled Out		Left in Well	
Size	Feet	In.	Feet	In.	Feet	In.
6 5/8"	1524	7	1524	7		
8 1/4"	277	3	277	3		
10"	35		35			
	Sewage 6 5/8" 12' 7"					
	Sewage 8 1/4" 2' 3"					

Shot Date June 28, 1910
Amount 85 Quarts
Sand
Result
Packer Size
Depth Set

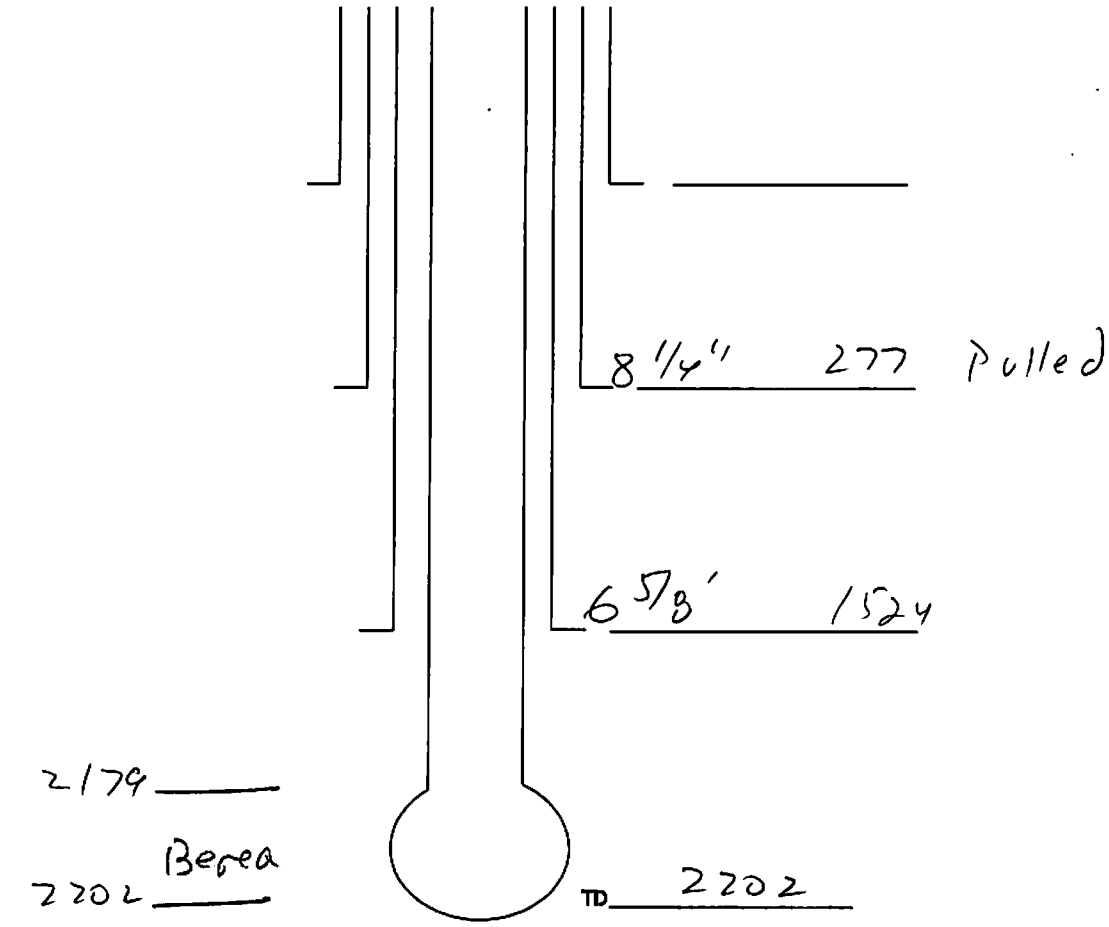
Production First 24 Hours ____ Bbls. Gas Test ____

Approved by E. B. South Superintendent

TA 6,7,4,4 17

Griffithsville Unit #2 Field

47-043- 3012



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

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AOR - Well Review Checklist

API Number: 47- 043 - Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 18
Farm Name: TA Griffith
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2336
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: Northing:
Elevation:
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☐

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

3P NA

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

Well No. 18 T. A. Griffith Farm 160 Acres

Lease No. 10225 Duval Township District Lincoln County W. Va. State

Pratt Drilling Company Contractor Contractor

Drilling Commenced March 30 1910 Drilling Completed May 10 1910

N. S. 83 E. W. 75-6 Elevation

Rock Formation	Top	Bottom	Steel Line Measurement	Remarks
Sand	100	125		
Slate	125	175		
Lime	175	200		
Slate	200	300		2 Bailers Water per hr 300
Sand	300	375		
Slate	375	425		
Sand	425	475		
Slate	475	525		
Sand	525	550		
Slate	550	600		
Sand	600	625		
Slate	625	670		
Sand	670	700		
Slate	700	750		
Sand	750	795		
Slate	795	900		
Salt Sand	900	1565		
Slate	1565	1595		Salt Water at 1050
Little Lime	1595	1632		
Slate	1632	1637		
Big Lime	1637	1817		
Red Rock	1817	1947		

continued below

CASING RECORD AS TALLIED. NOT STEEL LINE MEASUREMENT.

	Put in Well		Pulled Out		Left in Well	
Size	Feet	In.	Feet	In.	Feet	In.

Shot Date

Amount

Sand

Result

Packer Size

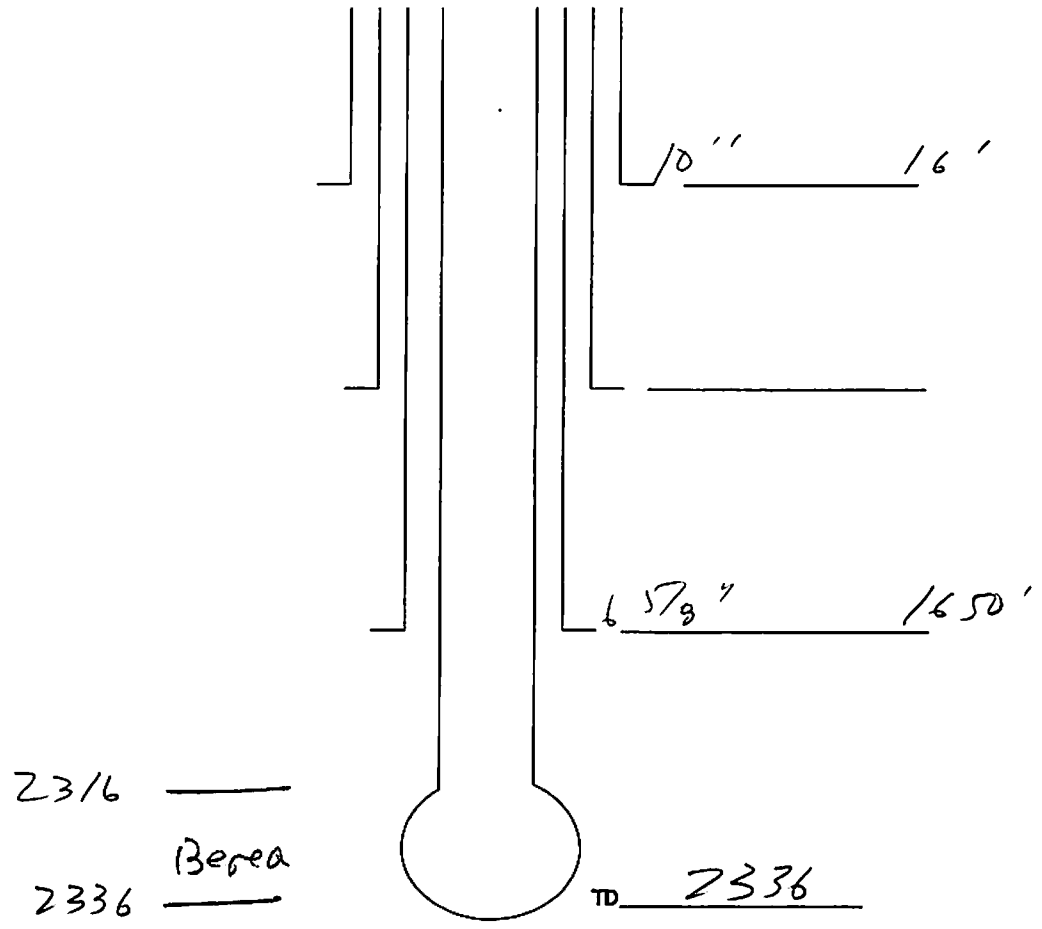
Depth Set

Production First 24 Hours.....Bbls. Gas Test.....

Approved by..... Superintendent

Griffithsville Unit #2 Field

47-043-



From Drillers Records/Plugging Records

(145)

WVDEP OOG Internal Use Only
Rev. 6/14/16

AOR - Well Review Checklist

API Number: 47- 043 - 02762 Area Permit Number: 2R AP
Operator Name: CONSOL
Operator's Well #: 1
Farm Name: Skelley
Field Name: Onthank Ville Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☐ Producer (NonWaterflood) ☑ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☐
TD of well: 4349
Completion Zones: Devonian Shale Perforated Interval: 2900 - 4349

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 417154 Northing: 4,230,202
Elevation: 254
Inside Field Boundary? ☐ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☐	Yes ☐	
Date of Last MIT:	Passed?	No ☐	Yes ☐	
Open Hole Completion		No ☑	Yes ☐	
Well penetrates injection zone?		No ☐	Yes ☑	
Well perforated in injection zone?		No ☑	Yes ☐	
Cemented across injection zone?		No ☐	Yes ☑	
Packer immediately above injection zone (<100')?		No ☐	Yes ☐	No Packer ☐
		If No: Provide Depth:		
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☑	

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

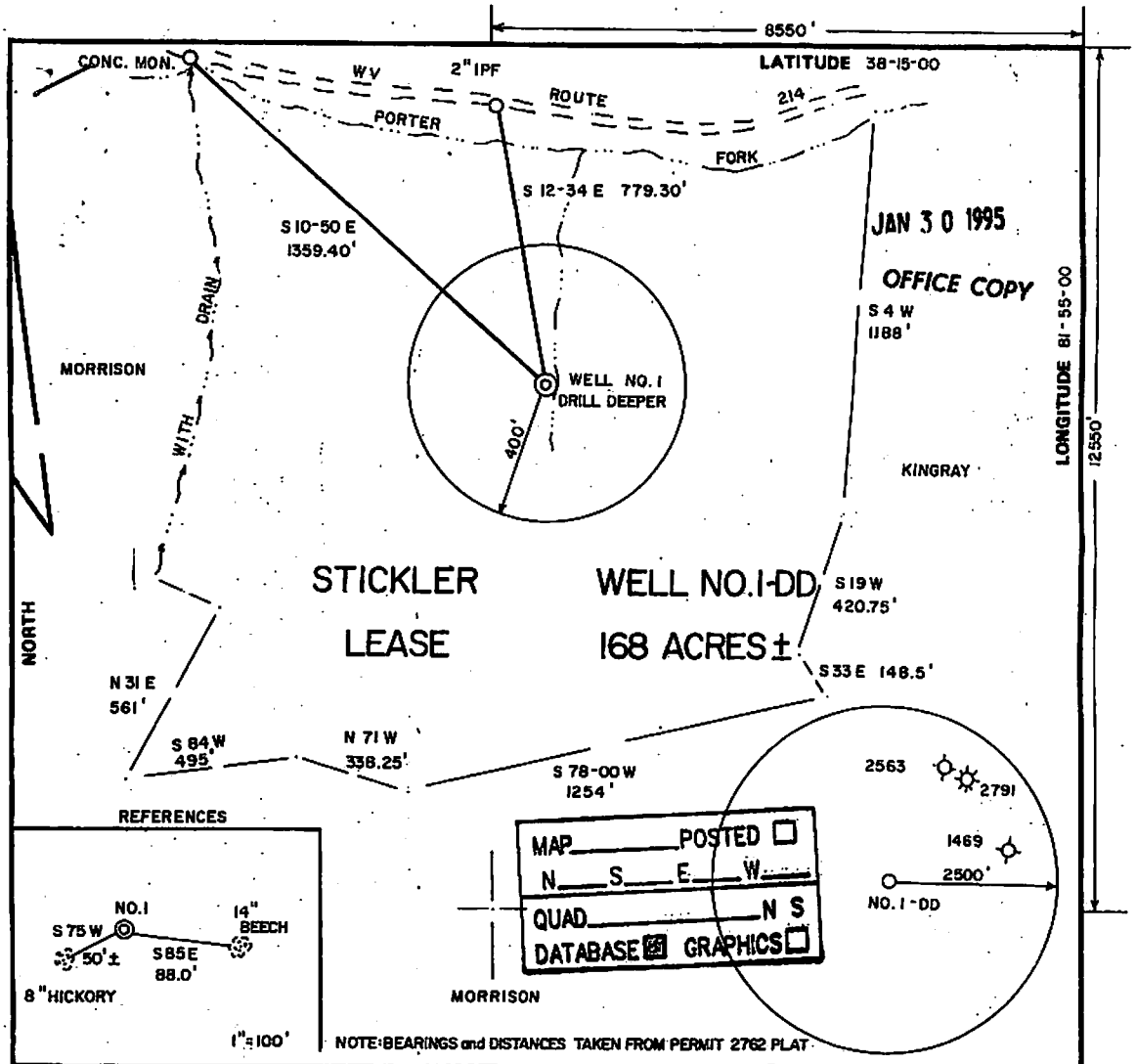
MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Devonian Shale well with 7" casing cemented across Berea.

Reviewer Name: Signature:
Date Reviewed:

** Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*



FILE NO.
DRAWING NO.
SCALE 1"=400'
MINIMUM DEGREE OF ACCURACY 1/200
PROVEN SOURCE OF ELEVATION BM 760'

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) M. Allen Jordan

R.P.E. L.L.S. 959

PLACE SEAL HERE

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

FORM IV-6
(8-78)

DATE JULY, 14, 19 93
OPERATOR'S WELL NO. STICKLER NO. 1-DD
API WELL NO.
47 - 043 - 2762-D
STATE COUNTY PERMIT

Deepening Canc.

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 X SHALLOW ___
LOCATION: ELEVATION 760' WATER SHED PORTER FORK
DISTRICT DUVAL COUNTY LINCOLN
QUADRANGLE GRIFFITHSVILLE 7.5'
SURFACE OWNER KERMIT & HELEN STICKLER et al. ACREAGE 168
OIL & GAS ROYALTY OWNER KERMIT & HELEN STICKLER LEASE ACREAGE 168
LEASE NO.
PROPOSED WORK: DRILL ___ CONVERT ___ DRILL DEEPER X 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 TUSCARORA ESTIMATED DEPTH 5800'
WELL OPERATOR CONTINENTAL RESERVES DESIGNATED AGENT LINDA ALDRIDGE
ADDRESS 147-3 WEST MAIN ST. ADDRESS 147-3 WEST MAIN ST.
BRIDGEPORT, WV 26330 BRIDGEPORT, WV 26330

LIN 2762-D CANC.

WR-35

RECEIVED
SEP 16 1991
OFFICE OF ENERGY

18-Dec-89
API # 47- 43-02762

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

Reviewed FMG
Recorded

Well Operator's Report of Well Work

Farm name: STICKLER, KERMIT & HELEN Operator Well No.: STICKLER #1

LOCATION: Elevation: 750.10 Quadrangle: GRIFFITHSVILLE

District: DUVAL County: LINCOLN
Latitude: 2550 Feet South of 38 Deg. 15Min. 0 Sec.
Longitude 1695 Feet West of 81 Deg. 55 Min. 0 Sec.

Company: CONTINENTAL RESERVES OIL
1701 COCHRAN ROAD, SUITE 200
PITTSBURGH, PA 15220-1098

Agent: NANCY COLTON

Inspector: JERRY HOLCOMB
Permit Issued: 12/20/89
Well work Commenced: 8/7/91
Well work Completed: 8/16/91
Verbal Plugging
Permission granted on:
Rotary X Cable Rig
Total Depth (feet) 4349
Fresh water depths (ft) 80, 90, 150

Salt water depths (ft) 895,940,980, 1060, 1135

Is coal being mined in area (Y/N)? N
Coal Depths (ft): None reported

Casing & Tubing	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
Size 9 5/8	475	475	CTS
7	2340	2340	120 SX

OPEN FLOW DATA

Producing formation Devonian Shale Pay zone depth (ft) 2900-4349
Gas: Initial open flow 603 MCF/d Oil: Initial open flow 0 Bbl/d
Final open flow 516 MCF/d Final open flow 0 Bbl/d
Time of open flow between initial and final tests 48 Hours
Static rock Pressure 490 psig (surface pressure) after 336 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.

Richard R. Carr

For: CONTINENTAL RESERVES OIL CO.

By: Richard R. Carr, Chief Executive Officer
Date: September 1, 1991

LIN 2762

K. B. 760

47-043-0 2762

Formation	Depth (Log)
Little Lime	1506
Big Lime	1547
Injun	1748
Berea	2236
Lower Huron	3411
Java	3786
Rhinestreet	4154
Marcellus	4307
Onondaga	4449

K66

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AOR - Well Review Checklist

API Number: 47- 043 02791 Area Permit Number: 2R AP
Operator Name: Consol Gas
Operator's Well #: 2
Farm Name: Stzelzer CTA Griffith
Field Name: Griffithsville Field Injection Zone:

Well Type: Injector ☐ Producer (Waterflood) ☐ Producer (NonWaterflood) ☑ Observation ☐ Other ☐
Well Status: Active ☒ Abandoned ☐ Plugged ☐
TD of well: 4463
Completion Zones: Dev Shale Perforated Interval: 3 250 – 4450

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 417,512 Northing: 4,230,624
Elevation: 283
Inside Field Boundary? ☐ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☑	Yes ☐
Date of Last MIT: _____	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☑	Yes ☐
Well penetrates injection zone?		No ☐	Yes ☑
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☐	Yes ☑
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

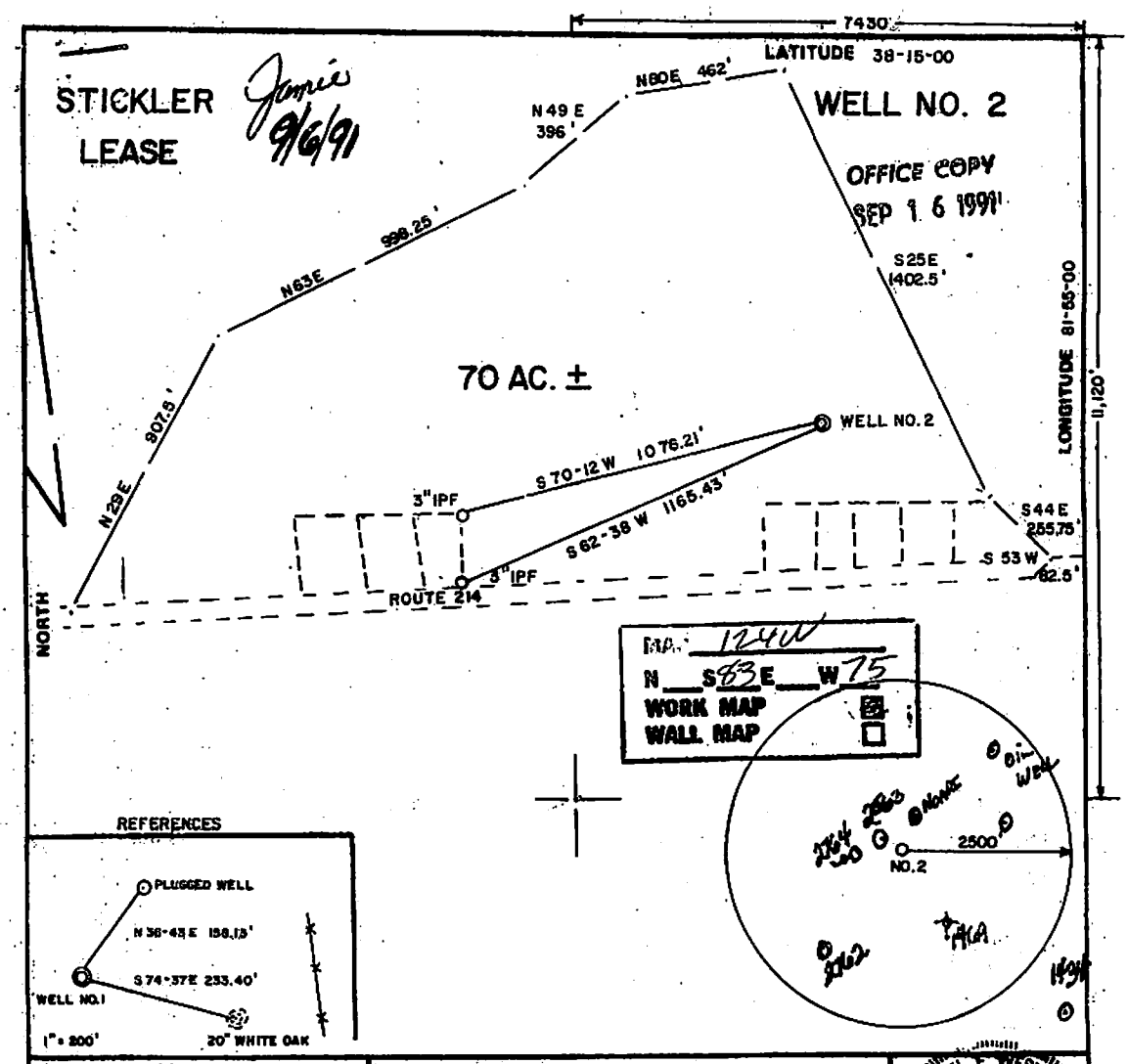
	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Reviewer Name: _____ Signature: _____
Date Reviewed: _____

** Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*



FILE NO.
DRAWING NO.
SCALE 1"=400'
MINIMUM DEGREE OF ACCURACY 1/200
PROVEN SOURCE OF ELEVATION B.M. ELEV. 760'

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) [signature]
R.P.E. ____ L.L.S. 645

RONNIE E. WESTFALL LICENSED NO 645 STATE OF WEST VIRGINIA SURVEYOR
PLACE SEAL HERE

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

FORM IV-6
(8-78)

DATE AUGUST 30, 19 91
OPERATOR'S WELL NO. STICKLER NO. 2
API WELL NO.
47 - 043 - 2791
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 X
LOCATION: ELEVATION 920' WATER SHED PORTER FORK
DISTRICT DUVAL COUNTY LINCOLN
QUADRANGLE GRIFFITHSVILLE 7.5'
SURFACE OWNER KERMIT AND HELEN STICKLER et al. ACREAGE 70 of 168
OIL & GAS ROYALTY OWNER KERMIT AND HELEN STICKLER LEASE ACREAGE 168
LEASE NO. ____
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 ESTIMATED DEPTH 4350'
WELL OPERATOR CONTINENTAL RESERVES CO. DESIGNATED AGENT LINDA ALDRIDGE
ADDRESS 147-3 WEST MAIN ST. ADDRESS 147-3 WEST MAIN ST.
BRIDGEPORT, WV 26330 BRIDGEPORT, WV 26330

MAY 2 8 1992

OFFICE COPY

WR-35

06-Sep-91

API # 47- 43-02791

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

Reviewed TMG

Recorded

Well Operator's Report of Well Work

Farm name: STICKLER, KERMIT & HELEN Operator Well No.: STICKLER #2

LOCATION: Elevation: 920.00 Quadrangle: GRIFFITHSVILLE

District: DUVAL County: LINCOLN
Latitude: 11120 Feet South of 38 Deg. 15Min. 0 Sec.
Longitude 7430 Feet West of 81 Deg. 55 Min. 0 Sec.

Company: CONTINENTAL RESERVES OIL
147-3 WEST MAIN STREET
BRIDGEPORT, WV 26330-0000

Agent: LINDA E. ALDRIDGE

Inspector: RICHARD CAMPBELL
Permit Issued: 09/06/91
Well work Commenced: 09/16/91
Well work Completed: 09/23/91
Verbal Plugging
Permission granted on:
Rotary x Cable Rig
Total Depth (feet) 4,463 (Logger)
Fresh water depths (ft) 50,340

Salt water depths (ft) 980, 1,065, 1,180
Is coal being mined in area (Y/N)? N
Coal Depths (ft): None Reported

Casing & Tubing	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
Size			
9 5/8	560	560	CTS
7	2,514	2,514	200 SX
4 1/2	4,446	4,446	115 SX

OPEN FLOW DATA

Producing formation Devonian Shale Pay zone depth (ft) Logger 3,250-4,450
Gas: Initial open flow 16 MCF/d Oil: Initial open flow Some N.M. Bbl/d
Final open flow N.M. MCF/d Final open flow 3 Bbl/d
Time of open flow between initial and final tests 192 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.

API # 47-043-02791

RECEIVED
WV Division of Environmental Protection
MAY 11 92
Permitting
Office of Oil & Gas

For: CONTINENTAL RESERVES OIL CO.

By: Richard R. Carr, CEO

Date: 5/08/92

Formation	Driller's Depths	
Sand & Shale	0	
Salt Sand	1,096	
Little Lime	1,682	
Pencil Cave	1,717	
Big Lime	1,720	
Injun	1,905	
Berea	2,429	Show Oil
Lower Huron	3,562	
Java	3,960	Gas check at 3,959 40/10 W 1/2"
TD	4,456	

Perforated 3,250 to 4,450 O.A.; 4 stage N_2; 750 mscf N_2/stage; No Proppant

RECEIVED
WV Division of
Environmental Protection
NOV 1 1 92
Permitting
Office

-5861

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Rev. 6/14/16

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AOR - Well Review Checklist

API Number: 47- 043 - 30 992 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 1
Farm Name: Hager + McClure
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2547
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 417,633 Northing: 4,233,894
Elevation: 321
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = 0
Bottom Hole Injection Pressure 0
Hydrostatic Pressure 0

Comments:

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

RECORD of Well No. 1 on Yager & Mitchum Farm Acres

Field, District Lincoln County

Rig Commenced 19 , Completed 19

Drilling Commenced Oct 8 1912, Completed Nov 27 1912

Cost per foot, 1.00 Contractor Weller Bros Address, Yawkey, W. Va.

Drillers' Names A.A. Weller & Henry Southard.

CONDUCTOR AND CASING USED IN DRILLING

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅛ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 3-16 Inch	4⅛ Inch
16						1880				

CONDUCTOR AND CASING LEFT IN WELL

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅛ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 3-16 Inch	4⅛ Inch
16						1880				

OIL WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods
12/12	80 qts.	2nd Shot 8	2743	100 qts.

GAS WELL

Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Soil		16	16	Ei= 10 [illegible]
Slate	16	25	9	
Sand	25	55	30	
Red Rock	55	130	75	
Slate	130	170	40	
Red Rock	170	210	40	
Sand	210	380	170	
Slate	380	425	45	Drilled 405' 10" hole and
Sand	425	550	125	reduced in Slate formation
Black Slate	550	562	12	
Sand	562	675	113	at 675' found water enough
Red & Slate	675	685	10	to drill with. 1 bbl per hr.
Sand	685	805	120	
Slate Shells	805	900	95	
Sand & Slate	900	1000	100	
Slate	1000	1080	80	
Maxon	1080	1100	20	
Slate	1100	1135	35	
Salt Sand	1135	1820	685	Showing of Gas at 1140'
Black Lime	1820	1855	35	5' in salt sand
Sand Slate	1855	1860	5	
White Lime	1860	2045	185	First salt sand water
Keener Sand	2045	2100	55	at 1196' in hole full
Slate	2100	2175	75	at 1230'
Slate Shelly	2175	2335	160	
Black Slate	2335	2509	174	Cased well 20' in the
Brown Shale	2509	2528	19	White Lime
Pocono Sand	2529	2547	18	

47-043-30992

47-043 - 30992

FORM GG-6

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

LEASE OR PROPERTY OWNER

ADDRESS

P. L. & L. Supply Company
NAME OF WELL OPERATOR

c/o Hallie Pack, Hamlin, West Va
COMPLETE ADDRESS

March 8, 19 51
WELL AND LOCATION

Duval District

Lincoln County

Well. No. 1

Hager & McClure Farm

STATE INSPECTOR SUPERVISING PLUGGING D. E. Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA, }
County of Lincoln } ss:

John McCallister and Dr. Kelly Roberts 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 Hal Pack well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 29 day of January, 19 51, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD	FILLING MATERIAL			PLUGS USED	CASING	
FORMATION	CONTENT	FROM	TO	SIZE & KIND	CSG PULLED	CSG LEFT IN
	Bridge Set At	2127'		7"	1550'	330'
	Neat Cement	2127'	2117'	2"	2400'	None
	Crushed Stone	5'		5-3/16"	1923'	None
	Clay		1910'			
	Neat Cement	1910'	1900'			
	Crushed Stone	5'				
	Bridge Set At	1800'				
	Neat Cement	1800'	1790'			
	Crushed Stone	5'				
	Clay		1115'			
	Neat Cement	1115'	1105'			
	Crushed Stone	5'				
	Bridge Set At	300'				
	Neat Cement	300'	290'			
	Clay to Surface					

COAL SEAMS

(NAME)

(NAME)

(NAME)

(NAME)

DESCRIPTION OF MONUMENT

Erected Marker According Rule 18, 1931 Regulations



and that the work of plugging and filling said well was completed on the 8 day of February, 19 51

And further deponents saith not.

John McCallister
Dr. Kelly Roberts

Sworn to and subscribed before me this 13 day of March, 19 51

Morris C. Ashworth
Notary Public.

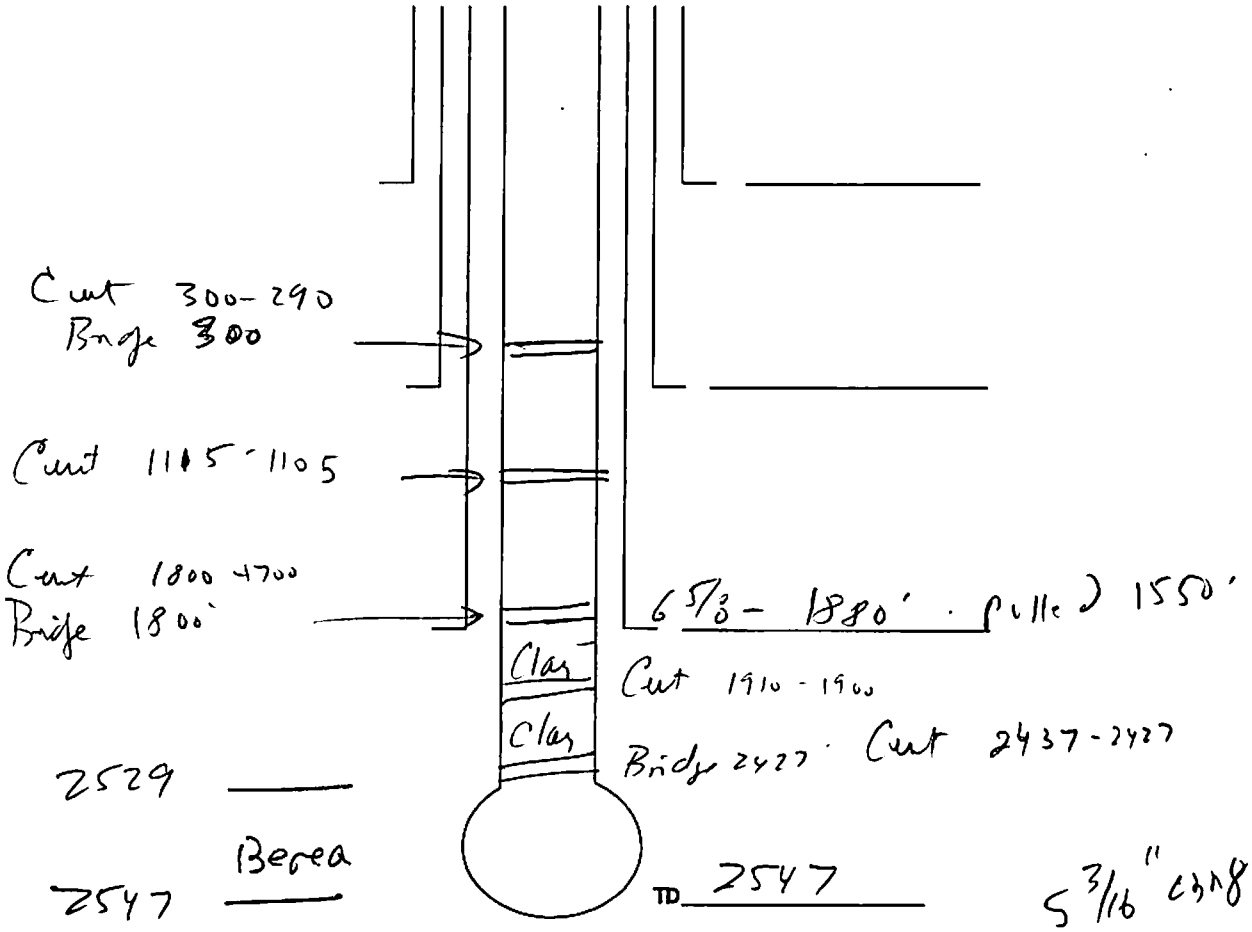
My commission expires:
My Commission Expires March 19, 1960

Permit No. LIN-992

Hoger + McClure

Griffithsville Unit #2 Field

47-043- 30992



From Drillers Records/Plugging Records

(143)

WVDEP OOG Internal Use Only
Rev. 6/14/16

AOR - Well Review Checklist

API Number: 47- 043 - 30963 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 2
Farm Name: Hayes McClure
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2481
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 417,393 Northing: 4,233,634
Elevation: 304
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

RECORD of Well No. 2 on Hagar & McClain Farm Acres

Field, District County

Rig Commenced 19 , Completed 19

Drilling Commenced June 9 1913, Completed July 18 1913

Cost per foot, 11½ Contractor Hawkey & Duncan Dist. Address, Hawkey W. Va.

Drillers' Names E. L. Stillwagon & C. S. Brown

CONDUCTOR AND CASING USED IN DRILLING

ductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7¼ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 3-16-Inch	4⅛ Inch
14						1790				

CONDUCTOR AND CASING LEFT IN WELL

ductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7¼ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 3-16 Inch	4⅛ Inch
14						1790				

OIL WELL

ben Shot	Size of Torpedo	1st Day's Production	Tubing	Rods
12½	80qts.			

GAS WELL

Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Conductor		14	14	El= 9[illegible]
Slate	14	100	86	
Sand	100	140	40	
Red Rock	140	200	60	
Sand	200	250	50	
Slate	250	285	35	
Coal	285	290	5	
Slate	290	350	60	300' 10" hole.
Sand	350	800	450	
Slate	800	925	125	
Sand	925	1020	95	
Lime	1020	1060	40	
Salt sand	1060	1730	670	
Little Lime	1730	1770	40	Hole full of Water at 1160'
Pencil Cave	1770	1780	10	
Big Lime	1780	1960	180	
Big Injun	1960	2020	60	
Slate	2020	2090	70	
Lime Shells	2090	2230	140	47-043-30963
Slate	2230	2440	210	
Brown Shale	2440	2461	21	
Berea sand	2461	2481	20	

47.043 - 30963

FORM OG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

LEASE OR PROPERTY OWNER

ADDRESS

Bradford Supply Company
NAME OF WELL OPERATOR

Bradford, Pennsylvania
COMPLETE ADDRESS

March 8, 19 51.
WELL AND LOCATION

Duval District

Lincoln County

Well. No. 2

Hager & McClure Farm

STATE INSPECTOR SUPERVISING PLUGGING D. E. Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

Kelly Roberts and John McCallister 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 Hal Pack, well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 26 day of January, 19 51, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD	FILLING MATERIAL			PLUGS USED	CASING	
FORMATION	CONTENT	FROM	TO	SIZE & KIND	CSG PULLED	CSG LEFT IN
	Bridge Set At	2440'		7"	1871'	None
	Clay		1940'	2"	2488'	None
	Cement	1940'	1930'			
	Crushed Stone	5'				
	Bridge Set At	1400'				
	Clay		1040'			
	Cement	1040'	1030'			
	Bridge Set At	300'				
	Neat Cement	300'	290'			
	Clay to Surface					
COAL SEAMS				DESCRIPTION OF MONUMENT		
(NAME)				Erected Marker According Rule 15, 1931 Regulations		
(NAME)						
(NAME)						
(NAME)						

RECEIVED MAR 1951 WEST VIRGINIA DEPARTMENT OF MINES

and that the work of plugging and filling said well was completed on the 6 day of February, 19 51

And further deponents saith not.

Kelly Roberts
John McCallister

Sworn to and subscribed before me this 19 day of March, 1951.

Notary Public.

My commission expires:
My Commission Expires March 10, 1960

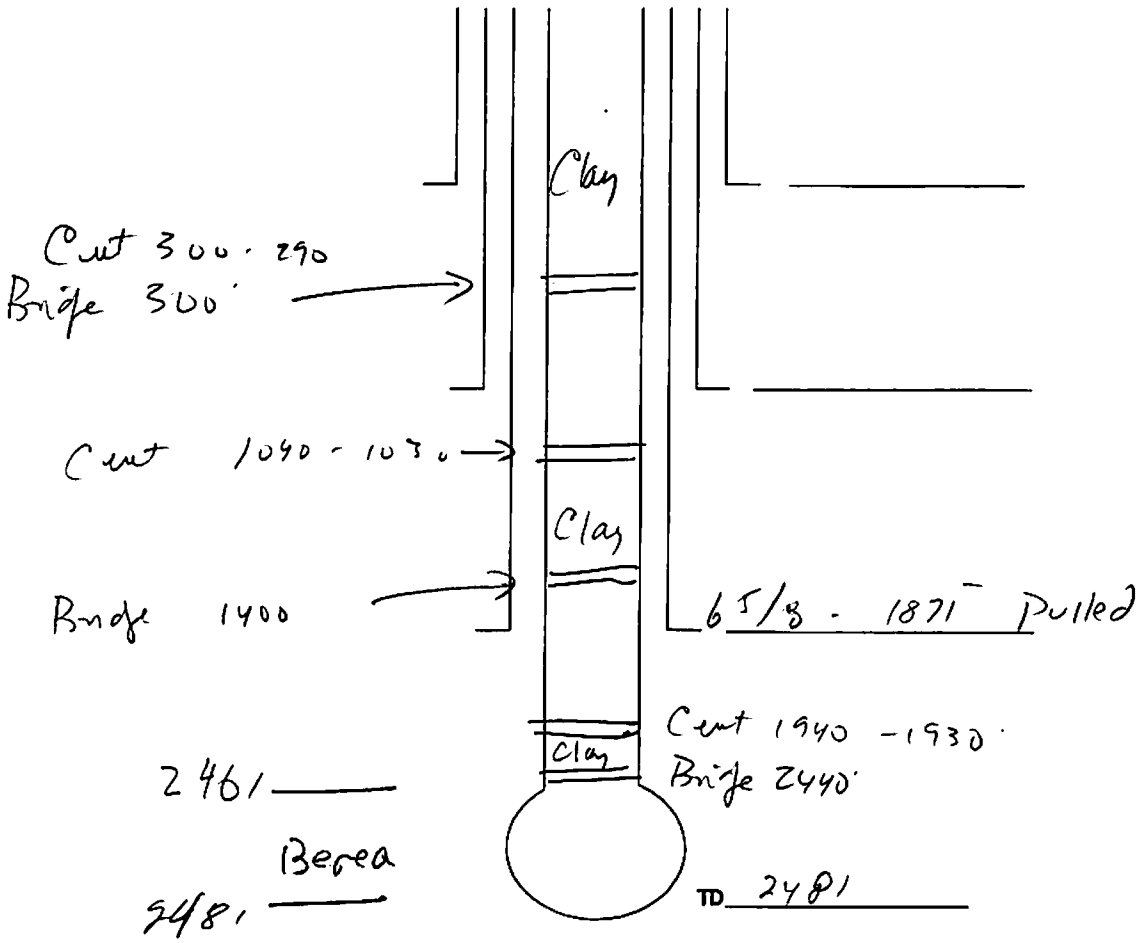
Permit No. LIN-963

Doris C Ashworth

Hagen + McClure 2

Griffithsville Unit #2 Field

47-043- 30963



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

(144)

AOR - Well Review Checklist

API Number: 47- 043 - 0 2272 Area Permit Number: 2R AP
Operator Name: 46 E
Operator's Well #: 3
Farm Name: Hazen + McClure
Field Name: Smithfield Unit 2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☐ Producer (NonWaterflood) ☒ Observation ☐ Other ☐
Well Status: Active ☒ Abandoned ☐ Plugged ☐
TD of well: 4371
Completion Zones: Dev Shale Perforated Interval: 3362 - 4230

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 417,811 Northing: 4,233,946
Elevation: 322
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐	
Date of Last MIT: _____	Passed?	No ☐	Yes ☐	
Open Hole Completion		No ☒	Yes ☐	
Well penetrates injection zone?		No ☐	Yes ☒	
Well perforated in injection zone?		No ☒	Yes ☐	
Cemented across injection zone?		No ☐	Yes ☐	
Packer immediately above injection zone (<100')?		No ☐	Yes ☐	No Packer ☐
		If No: Provide Depth:		
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒	

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = 0
Bottom Hole Injection Pressure 0
Hydrostatic Pressure 0

Comments:

Shallow Covered off by the DD
DD to shale - 3 1/2" cemented TOC 2680'

Reviewer Name: _____ Signature: _____
Date Reviewed: _____

** Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

WR-35

1-Dec-03

API # 47 043 02272

State of West Virginia
Division of Environmental Protection
Section of Oil and Gas

Well Operator's Report of Well Work

Farm name: SNODGRASS, CHARLES Operator Well No.: HAGER/MCCLURE 3

LOCATION: Elevation: 1056.28' Quadrangle: Griffithsville 7.5'

District: Duval County: Lincoln
Latitude: 100 Feet south of 38 Deg 15 Min 0 Sec.
Longitude: 6,550 Feet west of 81 Deg 55 Min 00 Sec.

Company: EAST RESOURCES, INC.
P.O. BOX 5519
VIENNA, WV 26105-5519

Agent: PHILIP S ONDRUSEK

Inspector: Ralph Triplett
Permit Issued: 12/01/03
Well work Commenced: 09/14/05
Well work Completed: 10/28/05
Verbal plugging
permission granted on:
Rotary X Cable Rig
Total Depth (feet) 4,371
Fresh water depths (ft) NA

t water depths (ft) NA

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

Casing & Tubing	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
Size			
65/8"	1861'	1861'	Existing
5 3/16"	1814'	1814'	Existing
3 1/2"	4354.55'	4354.55'	50 Sacks

OPEN FLOW DATA

Producing formation Devonian Shale Pay zone depth (ft) 3362'-4230'
Gas: Initial open flow 5 MCF/d Oil: Initial open flow ____ Bbl/d
Final open flow 90 MCF/d Final open flow ____ Bbl/d
Time of open flow between initial and final tests ____ Hours
Static rock pressure 402 psig (surface pressure) after 96 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: EAST RESOURCES, INC.
By: Roger Holden
Date: 12/22/05

Hagy & McClure #2
47-043-02272

Treatment : Treated perfs 3739'-4230' w/ 250 gals 7 1/2% HCL, 678 bbls 90 to 75 Quality foam, and 32,400# 20/40 sand

Treated perfs 3362'- 3682' w/ 250 gal 7 1/2% HCL, 465 bbls 90 to 75 Quality foam, and 17,600# 20/40 sand

Well Log : TD =4371'

Original TD = 2550'

2550' -4371'	Devonian Shale

47-043-02245

Lease No. 71097 Acres 40 Farm Name Hager & McClure Well No. 3

Map 17 4 W 2 Mi NW from Train Waters of Tenpoforks of Trace Fork of Mud River

N. S. 81 E. W. 75

Civil District Duval

County Lincoln

State W. Va.

GAS OIL Rights Owned By

Location Made

Rig Completed

Dr'g Commenced Dec. 26, 1916

Dr'g Completed Feb. 3, 1917

Dr'g Contractor Boone Drlg. Co.

Purchased From Big Creek

Date Purchased

Sold To

Date Sold

Date Abandoned

FORMATION

Kind	Top	Bottom	Steel Line Measurement	Tests
Salt Sand	1190	1851		
Pencil Cave	1851	1856		
Big Lime	1856	2051		
Big Injun	2051	2116		
Brown Shale	2510	2531		
Berea	2531	2550		

CASING RECORD

Size	Bottom Casing (Steel Line)	Put In Well (Tally Meas.)	Pulled (Tally Meas.)	Cemente
Cond.		12'		Date
6-5/8		1861		Size Csg.
5 3/16		1814		Top "
		7 5/8 5" 5.22-09		Bot. "
	510			
	2550			

PACKERS AND SHOES

Kind	Size	Depth Set	Date Se
O.W.S.			

TORPEDO RECORD

Date	No. Qts.	Size Shell	Top Shot	Bottom	Resu
2-12-1917	80		2533	2550	

DRILLING DEEPER

Commenced	Completed	Original Depth	Final Depth	Contrac

ABANDONMENT RECORD

Filled With	From	To	PLUG Size	PLUG Kind	PLUG De

Office of Oil & Gas
Chief of Office
NOV 14 2003
WV Department of Environmental Protection

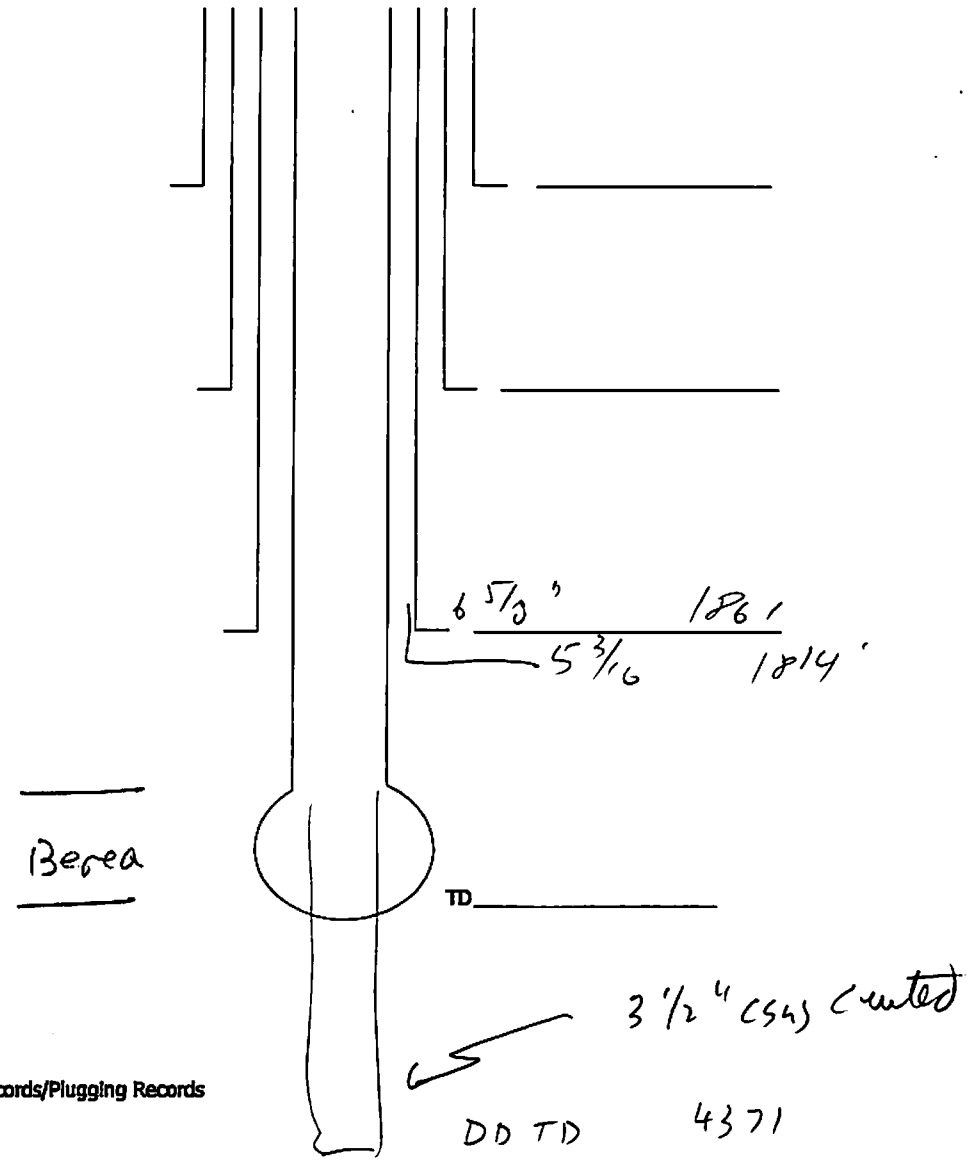
APPROVED

Initial Prod.	Sand	★ At Completion	★ 30 Days After	★
Oil	Berea	10 Brls.		
Gas				

Hoge 1 McClure 3

Griffithsville Unit #2 Field

47-043- 02272



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

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AOR - Well Review Checklist

API Number: 47- 043 - 02273 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 4
Farm Name: Hager + McClure
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2460
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 417,932 Northing: 4,233,858
Elevation: 291
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-02273

Well No. 4 Hager & McClure Farm 40 Acres
Lease No. 7097 Lincoln District Lincoln County W. Va. State
do. Penn Employees Contractor SOUTH PENN DRILLING TOOLS CO. Contractor
Drilling Commenced Feb. 5, 1923 Drilling Completed Mar. 17, 1923
N. S. 81 E. W. 75

ROCK FORMATION	TOP	BOTTOM	Steel Line Measurement	REMARKS
Conductor		16		El = 961.48
Sand	16	26		
Red Rock	26	90		
Sand	90	160		
Slate	160	200		
Shells	200	390		
Slate	390	410		
Sand	410	458		
Coal	458	463		
Water	458	463		3 B. per hour
Slate	463	500		
Sand	500	568		
8¼ Casing		502		
Lime	568	581		
Sand	581	705		
Slate	705	821		
Sand	821	833		
Slate	833	865		
Sand	865	901		
Black Slate	901	960		
Lime	960	981		
Sand	981	1040		

CASING RECORD AS TALLIED NOT STEEL LINE MEASUREMENT

SIZE	PUT IN WELL FEET	PUT IN WELL IN.	PULLED OUT FEET	PULLED OUT IN.	LEFT IN WELL FEET	LEFT IN WELL IN.

Shot Date
Amount
Sand
Result

Packer Size

Depth Set

Production First 24 Hours _____ Bbls. Gas Test _____

Approved by _____ Superintendent.

47-043-02273

Well No. 4 Hager & McClure Farm A
Lease No. District County S
Contractor Contra
Drilling Commenced 192 Drilling Completed 19.
N. S. E. W.

ROCK FORMATION	TOP	BOTTOM	Steel Line Measurement	REMARKS
Slate	1040	1065		
Salt Sand	1065	1267		
Brake	1276	1278		
2nd Salt Sand	1278	1671		
Water Hole full		1185		
Slate	1671	1680		
Maxon Sand	1680	1723		
Slate	1723	1727		
Little Lime	1727	1757		
Pencil Cave	1757	1766		
Big Lime	1766	1936		
6⅝ Casing		1785	1785	
Big Injun	1936	1986		
Slate Shells	1986	2200		
Shale	2200	2350		
Lime	2350	2387		
Brown Shale	2387	2437		
Berea Sand	2437	2457	2437	
Oil	2439	2457		
Total Depth		2460	2460	

CASING RECORD: AS TALLIED: NOT STEEL LINE MEASUREMENT

PUT IN WELL		PULLED OUT		LEFT IN WELL	
SIZE	FEET	IN.	FEET	IN.	FEET	IN.
8¼"	502	—	PULLED			
6⅝"	1800	—				
5½"	1832					

Shot Date 3/21/23
Amount 80 Qts
Sand Berea
Result Open Flow

Packer Size 6⅞" Lead and Rubber B. H.
Depth Set 1785

Production First 24 Hours 5 Bbls. Gas Test

Approved by A. H. Auchinleck Superintendent

47-043-02273

WWR-38

API# 47-043-2273

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY
DIVISION 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: Charles & Brenda Snodgrass
LOCATION: Elevation: 961.48'
District: Duval
Latitude: _____
Longitude: _____

Operator Well No.: Hager McClure No.4
Quadrangle: Griffithsville 7.5'
County: Lincoln
Deg. _____ Min. _____ Sec. _____
Deg. _____ Min. _____ Sec. _____

Well Type: Oil X Gas _____ Liquid Injection _____

Company: East Resources Inc.
P.O. Box 5519
Vienna, WV 26105
Agent: Philip S. Ondrusek
Inspector: Ralph Triplett
Permit Issued: _____

Coal Operator or Owner: NA
Coal Operator or Owner: NA

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Wood ss:
John Wells and Travis Breedlove 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 East Resources Inc., well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 5th day of December, 2005, and that the well was plugged and filled in the following manner:

TYPE	FROM	TO	PIPE REMOVED		LEFT
Rock & Clay	1879'	1821'			
Cement	1821'	1721'	6 5/8"	0'	1800'
Cement	1400'	1000'	5 1/2"	0'	1832'
Cement	500'	400'	2 3/8"	1870'	590'
Cement	100'	0'			
	Perforated 5" & 6" Csg.	1821' to 1721' w/ 11 holes			
		1400' to 1000' w/ 41 holes			
		500' to 400' w/ 10 holes			
		Coal from 458', 463', 100' to 50' w/.6 holes and 4 holes @ 50'			
6% Gel Between Cement Plugs					

Description of monument: 5" x 5'
and that the work of plugging and filling said well was completed on the 12th day of December, 2005
And further deponents saith not.

Travis Breedlove
John W. Wells

Sworn and subscribe before me this 13th day of January, 2006

My commission expires: Oct. 4 2006

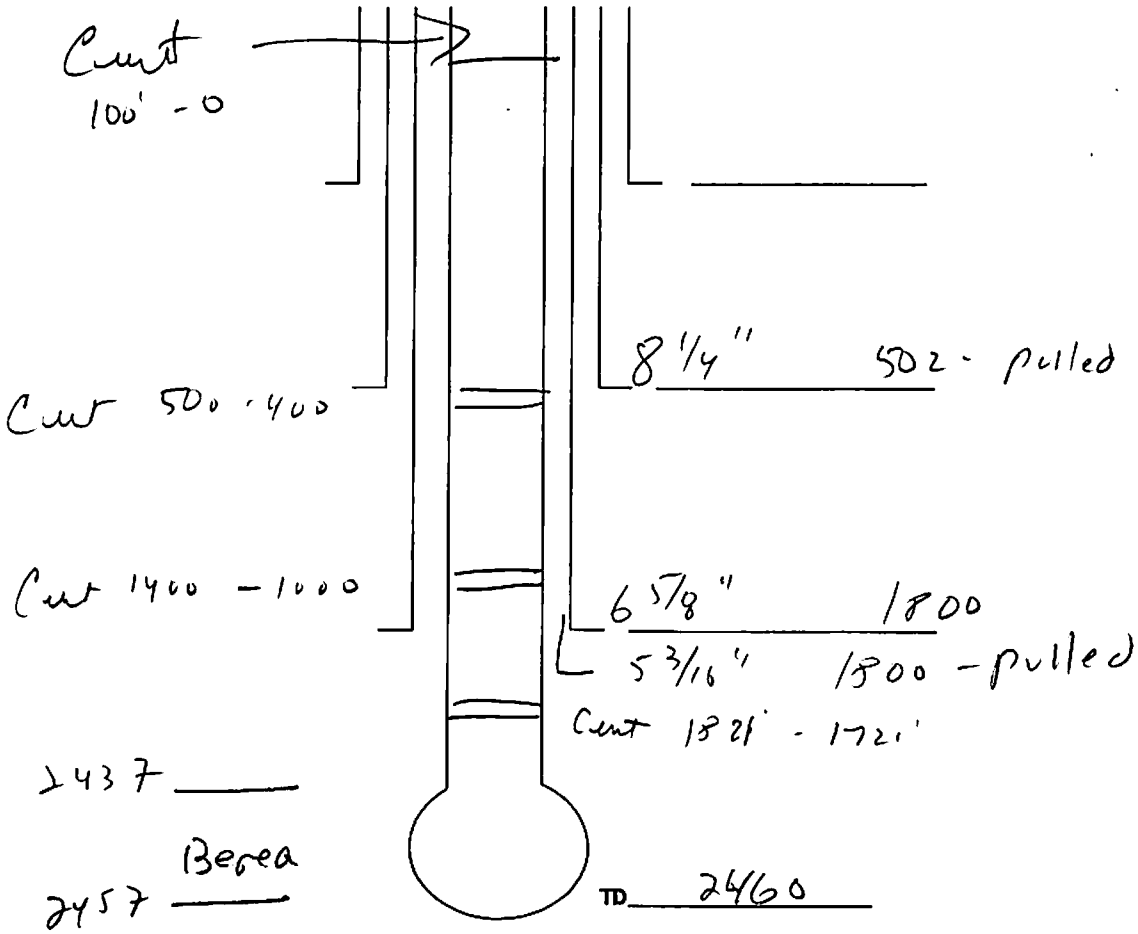
S. Dianne Dulaney
Notary Public

OFFICIAL SEAL
NOTARY PUBLIC
STATE OF WEST VIRGINIA
S. DIANNE DULANEY
P.O. Box 5519
Vienna, West Virginia 26105
My Commission Expires Oct. 4, 2006

Hogue + McClure 4

Griffithsville Unit #2 Field

47-043- 02273



From Drillers Records/Plugging Records

Reported Casing

WVDEP OOG Internal Use Only
Rev. 6/14/16

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AOR - Well Review Checklist

API Number: 47- 043 - 70309 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 1
Farm Name: Addison Hoyar
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2511
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 415,651 Northing: 4,234,243
Elevation: 794
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☐

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

38 NA

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

RECORD of Well No. 1 on J. B. Stringer Farm Acres [illegible]

mile Field, Dewar District Tuscaloosa County, Okmulgee

Rig Commenced ____ 19__, Completed ____ 19__

Drilling Commenced Feb 7 1910, Completed March 28 1910

Cost per foot, 1[illegible] Contractor, Walter Bros - Address, Hawkeye, Okla.

Drillers' Names, Wm A Cannon & E. A. Taylor

CONDUCTOR AND CASING USED IN DRILLING.

onductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅝ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 3-16 Inch	4¼ Inch
12										

CONDUCTOR AND CASING LEFT IN WELL.

onductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅝ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 3-16 Inch	4¼ Inch
12						1775'				

OIL WELL **GAS WELL**

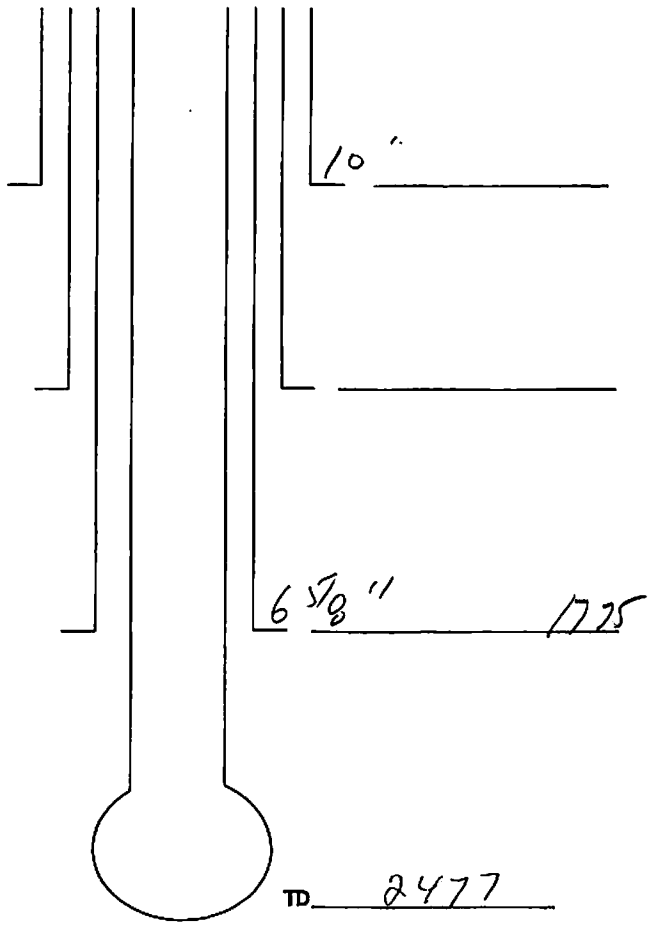
hen Shot	Size of Torpedo	1st Day's Production	Tubing	Rods		Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure
29/10	90 qts.	2nd Shot 2/4/14	1509	8						

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Red Rock	12	100	88	410' of 10" hole made
Sand	100	140	40	140 of 8" casing used
Red Rock	140	240	100	
Sand	240	265	25	Hole filled full from
Shale	265	320	55	Salt Sand water
Coal	320	325	5	at 1190'
Shale	325	375	50	
Sand	375	425	50	87 lbs of 6¼ casing from
Shale	425	460	35	bottom of hole
Sand	460	555	95	
Shale	555	630	75	
Coal	630	633	3	
Sand	633	750	117	Well was shot with 90 qts
Lime	750	840	90	of Nitro Glycerine with
Shale	840	865	25	shot at 450' of fluid.
Sand	865	930	65	
Shale & Shells	930	1095	165	
Soft Sand	1095	1730	635	
Black Sand	1730	1765	35	
Lime	1765	1770	5	
Big Lime	1770	1925	155	
Lime	1925	1985	60	
Lime Shale	1985	2435	450	
Brown Shale	2435	2455	20	
Lime Gas Sand	2455	2477	22	

70309
Adison Hagar #1

Griffithsville Unit #2 Field

47-043- 70309



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

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AOR - Well Review Checklist

API Number: 47- 043 - 0 2268 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 2
Farm Name: Addison Hays
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2511
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 415, 462 Northing: 4,234,490
Elevation: 306
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

Record of Well No. 2 on Watson Mayfield Farm Acres 200 plus

Well Field, Quinn District Lincoln Co. County Wirt

Rig Commenced ..... 19..., Completed ..... 19...

Drilling Commenced Nov 12 1910, Completed Nov 25 1910

Cost per foot, 1½ Contractor, Oliver Bros. Address, Hughey, W.Va.

Drillers' Names, J. H. Thompson & Bill McClelland

CONDUCTOR AND CASING USED IN DRILLING.

ctor	13 inch	10 inch	8¼ inch	8 inch	7⅝ inch	6⅝ inch	6¼ inch	5⅝ inch	5 3-16 inch	4¼ inch
11						1810				

CONDUCTOR AND CASING LEFT IN WELL.

uctor	13 inch	10 inch	8¼ inch	8 inch	7⅝ inch	6⅝ inch	6¼ inch	5⅝ inch	5 3-16 inch	4¼ inch
11		-				1810				

OIL WELL — GAS WELL

Shot	Size of Torpedo	1st Day's Production	Tubing	Rods		Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure
26/10	90 qts.	2nd Shot 11/2	2	1500 lbs.						

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Surface		11	11	440 ft - 8 1/2" Hole made
Red Rock	11	120	109	110 ft 6" Casing used
Lime	120	250	130	
Red Rock	250	280	30	Hole filled up with
Sand	280	320	40	water from Salt Sand
Lime	320	480	160	at 1225'
Sand	480	610	130	300 ft oil in hole
Lime	610	650	40	Rock Pressure
Sand	650	810	160	
Lime	810	870	60	
Sand	870	920	50	
Lime	920	1150	230	
Salt Sand	1150	1750	600	
Black Slate	1750	1805	55	
Coal	1805	1810	5	
Slate	1810	1940	130	
Big Injun	1940	2000	60	
Coffee Shale	2000	2470	470	
Brown Shale	2470	2490	20	
Pencil Cave	2490	2511	21	

47-043-02268

API # 47-043-2268-P

WR-38
DATE: 17-Oct-04

STATE OF WEST VIRGINIA
DIVISION OF ENVIRONMENTAL PROTECTION
SECTION 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: Anita Deardorff Operator Well No.: Addison Hager No. 2
LOCATION: Elevation: 1008.50 ft. Quadrangle: Garrett's Bend
District: Duval County: Lincoln
Latitude: 0" Feet South of 00 Deg. 00 Min. 00 Sec.
Longitude 0 Feet West of 00 Deg. 00 Min. 30 Sec.

RECEIVED
Office of Oil & Gas
Office of Chief
OCT 26 2004
WV Department of
Environmental Protection

Well Type: OIL X GAS X

Company: East Resources, Inc.
P.O. Box 5519
Vienna, WV 26105-5519

Coal Operator or owner

Agent: S. L. Meadows, Jr.

Coal Operator or owner

Permit Issued Date: June 16, 2003

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Jackson ss:

Terry Huffman and Jason Meadows 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 Ralph Triplett Oil and Gas Inspector representing the Director, say that said work was commenced on the 24th day of September .2004 , and that the well was plugged and filled in the following manner:

TYPE	FROM	TO	PIPE REMOVED	LEFT
Cement	2460	2360	2" tubing 2510'	-0-
Cement	2030	1930		
Cement	1860	1760	7" casing 111'	1699'
Cement	950	850		
Cement	650	550	No 8" in hole	
Cement	350	240		
Cement	160	Surface		
Perforated 7" @ 900' — 595' — 292' — & 111'				
Gel between all cement Plugs				

Description of monument: 7" csg 5 ft long with API number and that the work of plugging and filling said well was completed on the 15th day of October .2004 .

And further deponents saith not. S. L. Meadows, Jr.

Sworn and subscribe before me this 18th day of October . 2004
My commission expires: January 9, 2012

OFFICIAL SEAL
NOTARY PUBLIC
STATE OF WEST VIRGINIA
GINA M. RAMSEY
624 SOUTH CHURCH STREET
RIPLEY, WV 25271
My Commission Expires JAN. 9, 2012

Gina M Ramsey
Notary Public

Oil and Gas Inspector Ralph D. Triplett

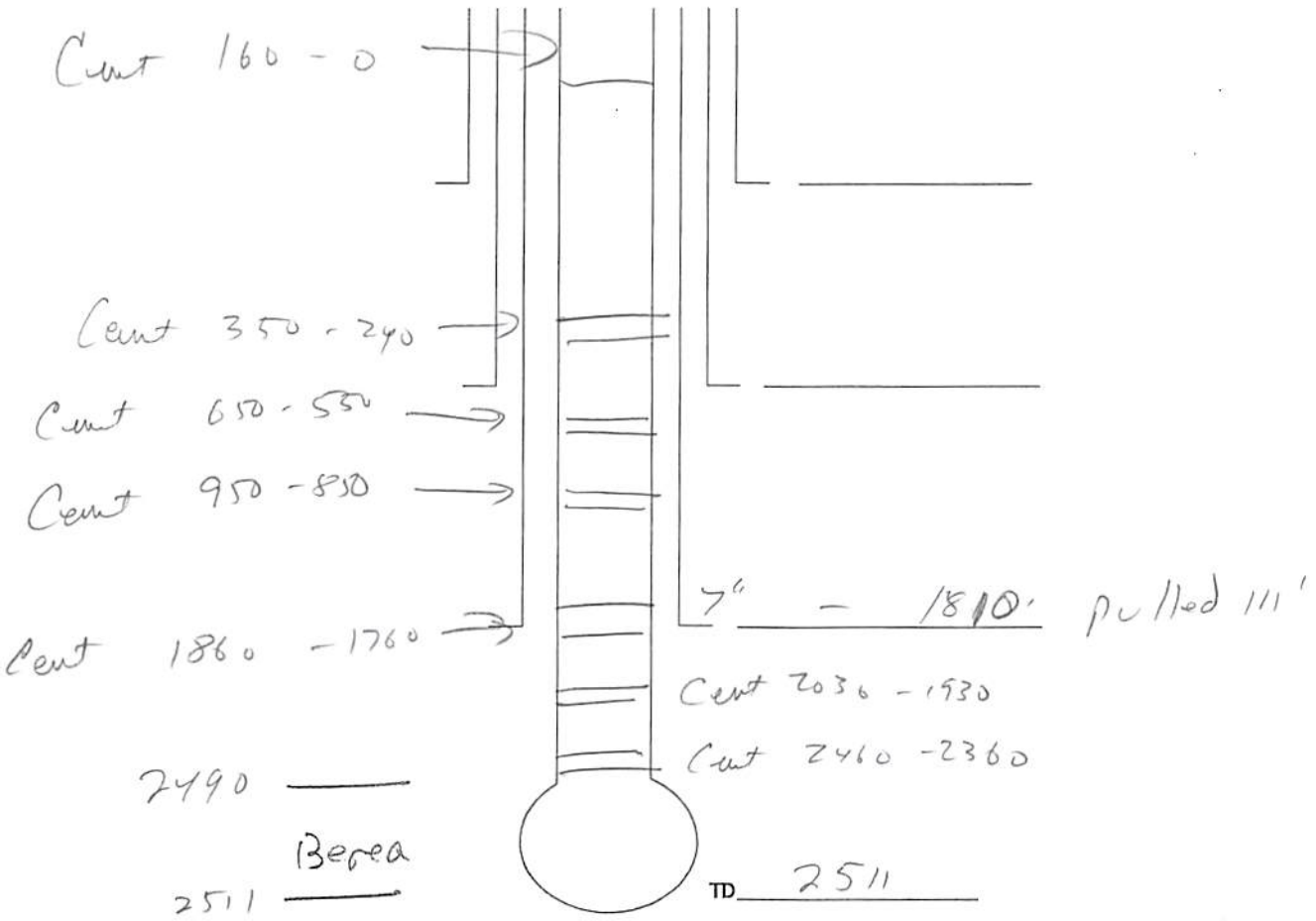
LIN 2268 P

OCT 29 2004

Addison Hayes 2

Griffithsville Unit #2 Field

47-043- 02268



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

(148)

AOR - Well Review Checklist

API Number: 47- 043 - 30900 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 3
Farm Name: A Hager
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2459
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 415,264 Northing: 4,234,313
Elevation: 275
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐	
Date of Last MIT:	Passed?	No ☐	Yes ☐	
Open Hole Completion		No ☐	Yes ☒	
Well penetrates injection zone?		No ☐	Yes ☒	
Well perforated in injection zone?		No ☒	Yes ☐	
Cemented across injection zone?		No ☒	Yes ☐	
Packer immediately above injection zone (<100')?		No ☐	Yes ☐	No Packer ☐
		If No: Provide Depth:		
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒	

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

RECORD of Well No. 3 on Mason Boggs Farm Acres

Field, District County,

Rig Commenced 19 , Completed 19

Drilling Commenced April 29 1911 , Completed June 14 1911

Cost per foot, 1¼ Contractor, Yawkey & Timmons Drlg Co Address, Yawkey, W. Va.

Drillers' Names, J. H. Vanbrunder & Elwood Metz

CONDUCTOR AND CASING USED IN DRILLING.

nductor	13 inch	10 inch	8¼ inch	8 inch	7⅛ inch	6⅝ inch	6¼ inch	5⅛ inch	3 16 inch	4⅜ inch
9						1775'				

CONDUCTOR AND CASING LEFT IN WELL.

nductor	13 inch	10 inch	8¼ inch	8 inch	7⅛ inch	6⅝ inch	6¼ inch	5⅛ inch	3 16 inch	4⅜ inch
9		–				1775'				

OIL WELL **GAS WELL**

hen Shot	Size of Torpedo	1st Day's Production	Tubing	Rods		Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure
4/15/11	90 qt.	–								

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Soil		9	9	El = 959.72
Sand	9	29	20	
Slate	29	89	60	
Sand	89	129	40	
Slate	129	219	90	
Sand	219	299	80	
Slate	299	320	21	
Coal	320	325	5	47-043-30900
Sand	325	395	70	
Slate	395	505	110	
Sand	505	585	80	375' of 10" hole
Slate & Sand	585	1055	470	
Slate	1055	1095	40	Hole full of Water at 1185'
Salt Sand	1095	1700	605	
Slate	1700	1715	15	
Little Lime	1715	1755	40	
Pencil Cave	1755	1765	10	
Big Lime	1765	1950	185	
Big Injun	1950	2015	65	
Slate	2015	2085	70	
Lime Shells	2085	2235	150	
Slate	2235	2420	185	
Brown Shale	2420	2438	18	
Berea Sand	2438	2459	21	

47.043-30900

FORM OG-6

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

LEASE OR PROPERTY OWNER

ADDRESS

G. S. H. Supply Company
NAME OF WELL OPERATOR
c/o Hallie Pack, Hamlin, West Va.
COMPLETE ADDRESS

August 23 1950
WELL AND LOCATION

Duval District

Lincoln County

Well. No. 3

Farm

A. HAGER

STATE INSPECTOR SUPERVISING PLUGGING D. E. Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

and

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, well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the day of, 19, and that the well was plugged and filled in the following manner: August 50

SAND OR ZONE RECORD	FILLING MATERIAL			PLUGS USED	CASING	
FORMATION	CONTENT	FROM	TO	SIZE & KIND	CSG PULLED	CSG LEFT IN
Bridge Set At		2418'				
	Cement	2418'	2408'			
	Crushed Stone	5'				
	Clay to	1805'				
	Heat Cement	1805'	1795'			
	Bridge At	1500'				
	Cement	1500'	1490'			
	Crushed Stone	5'				
	Clay to	1070'				
	Cement	1070'	1060'			
	Crushed Stone	5'				
	Bridge At	400'				
	Cement	400'	390'			
	Crushed Stone	5'				
COAL SEAMS	Clay to Surface			DESCRIPTION OF MONUMENT		
(NAME)				Erected Marker According		
(NAME)				Rule 18, 1931 Regulations		
(NAME)						
(NAME)						

SEP 1950
DEPARTMENT OF MINES

and that the work of plugging and filling said well was completed on the 22 day of August, 19 50

And further deponents saith not.

W. I. Dale
Contractor

Sworn to and subscribed before me this 31 day of August, 1950

G. P. Davis
Notary Public.

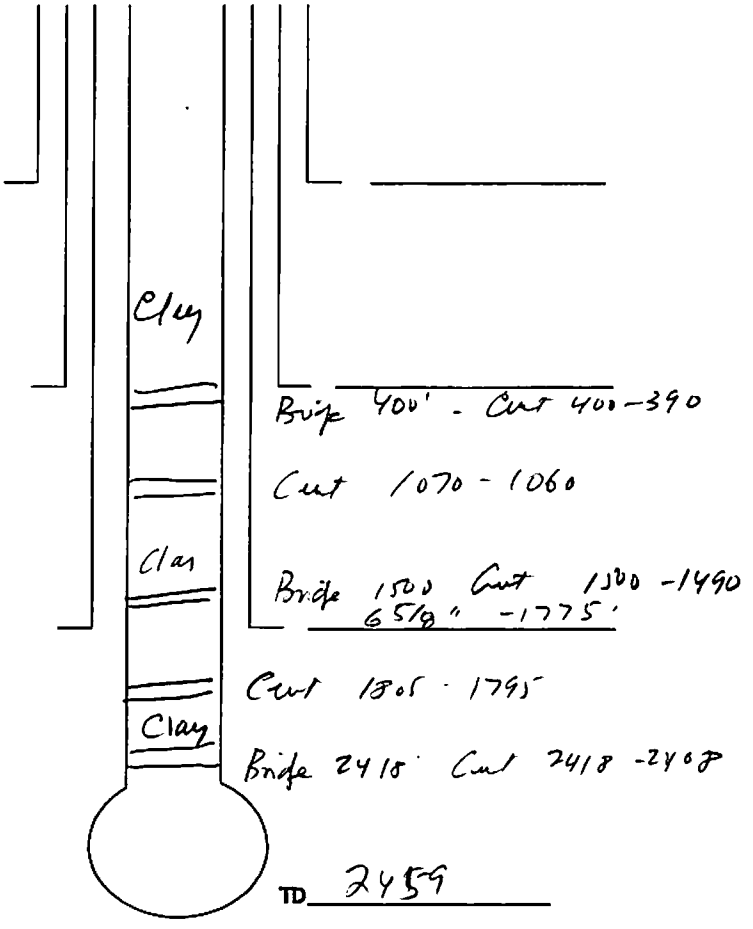
My commission expires:
April 1, 1957

Permit No.

17 Hagen 3

Griffithsville Unit #2 Field

47-043- 30900



2438

Berea

2459

From Drillers Records/Plugging Records

Pulled reference

NO CASING

WVDEP OOG Internal Use Only
Rev. 6/14/16

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AOR - Well Review Checklist

API Number: 47- 043 - 30901 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 4
Farm Name: A Hagar
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2514
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 415,759 Northing: 4,234,397
Elevation: 305
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:
Date Reviewed:

** Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

RECORD of Well No. 4 on Addison Steger Farm ____ Acres ____

Field, ____ District ____ County ____

Rig Commenced ____ 19__, Completed ____ 19__

Drilling Commenced May 5 1913, Completed June 20 1913

Cost per foot, 1½ Contractor Hawkey & Thomas Drl Co Address Hawkey, W. Va.

Drillers' Names E. L. Mc Clintock & Frank Bassett

CONDUCTOR AND CASING USED IN DRILLING

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7¼ Inch	6¼ Inch	6¼ Inch	5¼ Inch	5 3-16 Inch	4¼ Inch
16						1825				

CONDUCTOR AND CASING LEFT IN WELL

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7¼ Inch	6¼ Inch	6¼ Inch	5¼ Inch	5 3-16 Inch	4¼ Inch
16						1825				

OIL WELL / GAS WELL

Open Shot	Size of Torpedo	1st Day's Production	Tubing	Rods		Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure
12/13	80 qts.									

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Surface		16	16	El= 101[illegible]
Red Rock	16	80	64	
Slate	80	140	60	470' 10" hole
Sand	140	200	60	
Red Rock	200	250	50	
Sand	250	470	220	
Slate	470	480	10	
Sand	480	610	130	
Coal	610	615	5	hole full of water at 1235'
Slate	615	630	15	
Sand	630	700	70	
Coal	700	710	10	
Sand	710	920	210	
Slate & shells	920	1205	285	a little show of oil & gas
Salt sand	1205	1755	550	at 2040'
Slate	1755	1775	20	
Little Lime	1775	1810	35	
Pencil Cave	1810	1820	10	
Big Lime	1820	1990	170	
Big Injun	1990	2050	60	
Slate & shells	2050	2250	200	
Slate	2250	2465	215	
Injun shells	2465	2475	10	
Coffee shale	2475	2495	20	
Berea sand	2495	2514	19	

47-043-30901

47.043 - 30901

FORM 04-6

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

LEASE OR PROPERTY OWNER

ADDRESS

G. S. H. Supply Company
NAME OF WELL OPERATOR
c/o Hallie Pack, Hamlin, West Virginia
COMPLETE ADDRESS
October 2 19 50
WELL AND LOCATION
Duval District
Lincoln County
Well No. 4
A. Hager Farm

STATE INSPECTOR SUPERVISING PLUGGING D. E. Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

Kelly Roberts and Charles Hunt 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 Hal Pack, well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 19 day of September, 19 50, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD	FILLING MATERIAL			PLUGS USED	CASING	
FORMATION	CONTENT	FROM	TO	SIZE & KIND	CSG PULLED	CSG LEFT IN
Bridge Set At		2475'		7"	1823'	None
	Neat Cement	2475'	2465'	5½"	1810'	None
	Crushed Stone	5'				
	Red Clay		1855'			
	Neat Cement	1855'	1845'			
	Crushed Stone	5'				
	Bridge at	1500'				
	Neat Cement	1500'	1490'			
	Crushed Stone	5'				
	Red Clay		1135'			
	Neat Cement	1185'	1845'			
	Crushed Stone	5'				
	Bridge at	400'				
	Neat Cement	400'	390'			
	Crushed Stone	5'				
COAL SEAMS	Clay to Surface			DESCRIPTION OF MONUMENT		
(NAME)				Marker Erected According		
(NAME)				Rule 18, 1931 Regulations		
(NAME)						
(NAME)						

OCT 1950 WEST VIRGINIA DEPARTMENT OF MINES

and that the work of plugging and filling said well was completed on the 29 day of September, 19 50

And further deponents saith not.

Kelly Roberts
Charles Hunt

Sworn to and subscribed before me this 10 day of Oct, 1950.

J. S. Brumfield
Notary Public.

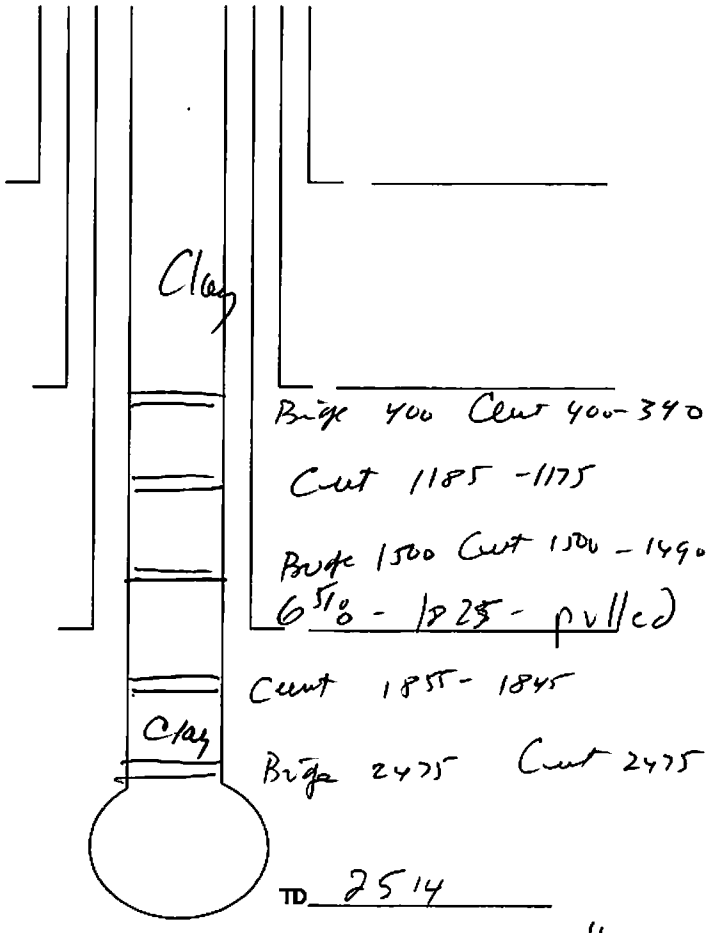
My commission expires:
April 4, 1957

Permit No. LUI-901

A Hoger 4

Griffithsville Unit #2 Field

47-043- 30901



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

150

AOR - Well Review Checklist

API Number: 47- 043 - Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 5
Farm Name: A Haga
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well:
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 415,455 Northing: 4,234,176
Elevation: 345
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☐

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = 0
Bottom Hole Injection Pressure 0
Hydrostatic Pressure 0

Comments:

38 NA

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

D of Well No. 5 on Madison Hagar Farm Acres

Field, District County

g Commenced 19 , Completed 19

Drilling Commenced Apr 4 1914, Completed May 19 1914

Cost per foot, 1.15 Contractor Yawkey & Forman Oil Co Address, Yawkey, W. Va.

Drillers' Names Frank Bassett & F. L. McElhattan.

CONDUCTOR AND CASING USED IN DRILLING

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅝ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 3-16-Inch	4⅛ Inch
10						1780				

CONDUCTOR AND CASING LEFT IN WELL

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅝ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 3-16 Inch	4⅛ Inch
10						1780				

OIL WELL — GAS WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods		Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure
5/21/14	80 qts.									

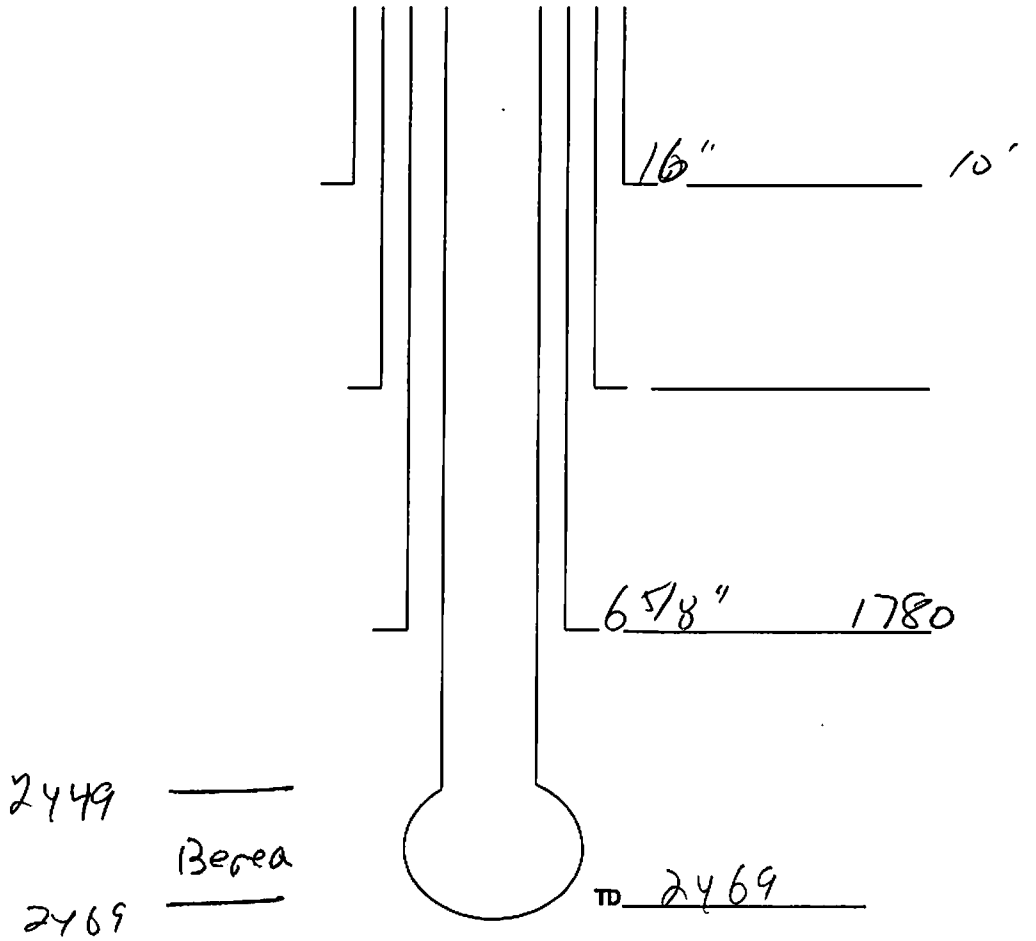
FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Conductor		10	10	El. 967
Sand	10	20	10	
Red Rock	20	60	40	
Slate	60	80	20	
Red Rock	80	100	20	
Sand	100	140	40	
Slate	140	240	100	440' of 10" hole
Sand	240	320	80	
Slate	320	360	40	
Sand	360	600	240	
Slate	600	680	80	
Sand	680	860	180	
Slate	860	900	40	
Sand	900	940	40	Hole full of water at 1175'
Slate & shells	940	1160	220	
Salt Sand	1160	1720	560	
Slate	1720	1730	10	
Little Lime	1730	1765	35	
Pencil Cave	1765	1770	5	ABANDONED
Big Lime	1770	1950	180	NOV 13 1928
Big Injun	1950	2040	90	NOV 13 1929
Slate	2040	2120	80	
Lime Shells	2120	2200	80	670
Slate	2200	2370	170	Casing Used - 1780'
Slate & shells	2370	2429	59	Pulled - 1780'
Brown Shale	2429	2449	20	
Berea Sand	2449	2469	20	

Adison Hagar #5

A Hogan 5

Griffithsville Unit #2 Field

47-043-



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

151

AOR - Well Review Checklist

API Number: 47- 043 - 30991 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 1
Farm Name: Ira Hill
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2599
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 1,372,648.6 Northing: 13,883,801.7
Elevation: 1087
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

09-IC-

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

47-043-30995

WELL RECORD

Oil or Gas Well _____ (KIND)

Permit No. _____

Company P. J. & L. Supply Company
Address c/o Hallie Pack, Hamlin, West Virginia
Farm Ira M. Hill Acres _____
Location (waters) _____
Well No. 1 Elev. _____
District Duval County Lincoln
The surface of tract is owned in fee by _____
Address _____
Mineral rights are owned by _____
Address _____
Drilling commenced _____
Drilling completed _____
Date Shot _____ From _____ To _____
With _____
Open Flow /10ths Water in _____ Inch
_____ /10ths Merc. in _____ Inch
Volume _____ Cu. Ft.
Rock Pressure _____ lbs. _____ hrs.
Oil _____ bbls., 1st 24 hrs.
Fresh water _____ feet _____ feet
Salt water _____ feet _____ feet

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Packer
16			
13			Size of
10			
8¼			Depth set
6⅝	1900		
5 3/16	1946		Perf. top
3			Perf. bottom
2			Perf. top
Liners Used			Perf. bottom

CASING CEMENTED _____ SIZE _____ No. Ft. _____ Date

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

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks
Salt Sand			1215	1390			
Sand			1390	1535			
Sand			1550	1616			
Little Lime			1850	1875			
Pencil Cave			1875	1885			
Big Lime			1885	2075			
Big Injun			2075	2115			
Berea			2575	2594			
Slate			2594	2599			
Total Depth				2599			

FEB 1951
WEST VIRGINIA
DEPARTMENT OF MINES

(Over)

47-043 - 30995

FORM OG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE. ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

LEASE OR PROPERTY OWNER

ADDRESS

P. L. & L. Supply Company
NAME OF WELL OPERATOR

c/o Hallie Pack, Hamlin, West Va.
COMPLETE ADDRESS

March 8, 19 51
WELL AND LOCATION

Duval District

Lincoln County

Well No. 1

Ira M. Hill Farm

STATE INSPECTOR SUPERVISING PLUGGING D. E. Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

Geo. Adkins and Merrill Pack

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 Hal Pack, well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 13 day of February, 19 51, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD		FILLING MATERIAL			PLUGS USED	CASING	
FORMATION		CONTENT	FROM	TO	SIZE & KIND	CSG PULLED	CSG LEFT IN
		Bridge Set At	2574'		5-3/16"	1946'	None
		Neat Cement	2574'	2564'	2"	652'	None
		Crushed Stone	5'		7"	224'	1676'
		Clay		1930'			
		Neat Cement	1930'	1920'			
		Crushed Stone	5'				
		Bridge Set At	1300'				
		Neat Cement	1300'	1290'			
		Crushed Stone	5'				
		Clay		1195'			
		Neat Cement	1195'	1185'			
		Crushed Stone	5'				
		Bridge Set At	300'				
		Neat Cement	300'	290'			
		Crushed Stone	5'				
COAL SEAMS		Clay to Surface			DESCRIPTION OF MONUMENT		
(NAME)					Erected Marker According Rule 18, 1931 Regulations		
(NAME)							
(NAME)							
(NAME)							



and that the work of plugging and filling said well was completed on the 2 day of March, 19 51.

And further deponents saith not.

Geo Adkins
Merrill Pack

Sworn to and subscribed before me this 13 day of March, 19 51.

Notary Public.

My commission expires:

Permit No. LIN-995

WVDEP OOG Internal Use Only
Rev. 6/14/16

(152)

AOR - Well Review Checklist

API Number: 47- 043 - 0 2039 Area Permit Number: 2R AP
Operator Name: H6 E
Operator's Well #: 2
Farm Name: I Hill
Field Name: _____ Field Injection Zone: _____

Well Type: Injector ☐ Producer (Waterflood) ☐ Producer (NonWaterflood) ☒ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☐
TD of well: 4067
Completion Zones: Dev Shale Perforated Interval: 2416 – 3067

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 418,649 Northing: 4,231,992
Elevation: 279
Inside Field Boundary? ☐ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐	
Date of Last MIT: _____	Passed?	No ☐	Yes ☐	
Open Hole Completion		No ☒	Yes ☐	
Well penetrates injection zone?		No ☐	Yes ☒	
Well perforated in injection zone?		No ☒	Yes ☐	
Cemented across injection zone?		No ☐	Yes ☐	
Packer immediately above injection zone (<100')?		No ☐	Yes ☐	No Packer ☐
		If No: Provide Depth:		
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒	

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Drilled deeper + Completed in Dev shale
Berea Canceled off Prior to DD
3½ Cemed TOC @ 2598'

Reviewer Name: _____ Signature: _____
Date Reviewed: _____

** Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

Ira Hill

T. M. Ertl WELL A(E) ACRES LEASE NO. F2057
1/4M: W from Train Water or Tango Fork of Trace Fork
Map 124W
UP OR Duval COUNTY Lincoln STATE W. Va. N. S. 82 E. W. 75

MMENCED 19 COMPLETED
IMMENCED April 30 19 15 COMPLETED June 11
MMENCED 19 COMPLETED

19 CONTRACTOR
19 15 CONTRACTOR Wayland Oil & Gas Co.
19 CONTRACTOR

FORMATION

KIND	TOP	BOTTOM	STEEL LINE MEASUREMENT	REMARKS
·:aoe		14		
ıd	14	40		
.te	40	130		
ıd	130	190		
.te & .hale	190	400		
ıd	400	430		
ıte	430	470		
ıd	470	530		
ıte	530	540		
ıd	640	620		
ıte	620	800		
ıd Lime	800	875		
ıte .hale	875	975		
lt sand	975	1255		
ıte	1255	1285		
ıd	1895	1380		
ɜak	1380	1400		
ıd	1400	1480		
ne .hale	1480	1600		
xon sand	1600	1680		
ɜak	1680	1690		
ack lime	1690	1722		
ıdi cave	1722	1730		
ite lime	1730	1920		
ɜ Injun	1920	1985		
rea	2396	2416		
tal depth		2416		

TAL DEPTH

CASING RECORD

SIZE	BOTTOM CASING (STEEL LINE)	PUT IN WELL (TALLY MEAS.)	PULLED (TALLY MEAS.)	LEFT IN WHEN ABN'D.
6-5/8	1730	2-6-29		
5 3/16	1773	(Note Below)		

PACKERS

KIND	SIZE	DEPTH SET	DATE SET

TORPEDO RECORD

DATE SHOT	NO. QTS.	SIZE SHELL	TOP SHOT	BOTTOM	RESULT
6- 1-15	9				

ABANDONMENT RECORD

FILLED WITH	FROM	TO	SIZE	PLUG KIND	DEPTH

PRODUCTION RECORD

HOURS BEFORE SHOT SAND BBLS.
HOURS AFTER SHOT SAND BBLS.
IS TEST

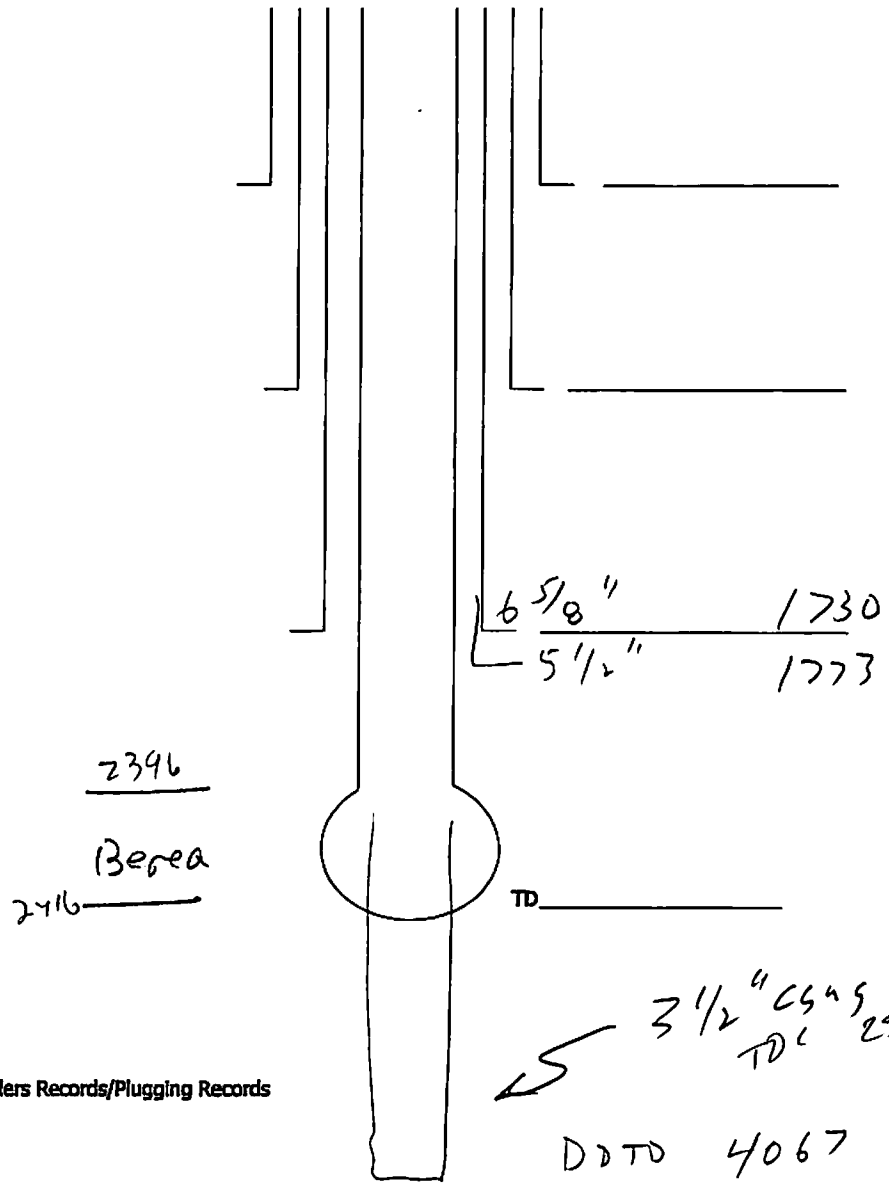
REMARKS

2-19-29 Ran 82 Jts 5 3/16" Casing
Set on 6 5/8" x 6 5/8" x 16" Lyon Wall Packer
7-6-29 Pulled 5 3/16" Casing & Ran again
Equalizer Same Packer Brought Water back to
Gum, Few Packers

APPROVED BY SUPT.

Griffithsville Unit #2 Field

47-043-



From Drillers Records/Plugging Records

WR-35

13-Jul-05

API # 47 043 02039

State of West Virginia
Division of Environmental Protection
Section of Oil and Gas

Well Operator's Report of Well Work

COPY

Farm name: LOY, DALE & REGINA Operator Well No.: IRA HILL

LOCATION: Elevation: 919' Quadrangle: Griffithsville 7.5'

District: DUVAL County: LINCOLN
Latitude: 6,475 Feet south of 38 Deg 15 Min 0 Sec.
Longitude: 3,725 Feet west of 81 Deg 55 Min 00 Sec.

Company: EAST RESOURCES, INC.
P.O. BOX 5519
VIENNA, WV 26105-5519

Agent: PHILIP S ONDRUSEK

Inspector: RALPH TRIPLETT
Permit Issued: 07/13/05
Well work Commenced: 10/18/05
Well work Completed: 12/09/05
Verbal plugging permission granted on:
Rotary X Cable Rig
Total Depth (feet) 4067'
Fresh water depths (ft) NA

Salt water depths (ft) NA

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

Casing & Tubing	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
Size			
6 5/8"	1730'	1730'	Existing
5 1/2"	1773'	1773'	Existing
3 1/2"	3931.6'	3931.6'	ON PACKER @ 3806'

OPEN FLOW DATA

Producing formation Devonian Shale Pay zone depth (ft) 2416'-4067'
Gas: Initial open flow 5 MCF/d Oil: Initial open flow 10 Bbl/d
Final open flow 5 MCF/d Final open flow 5 Bbl/d
Time of open flow between initial and final tests Hours
Static rock pressure 200 psig (surface pressure) after 650 Hours

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

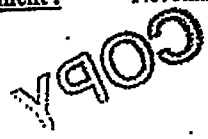
NOTE: ON BACK OF THIS FORM, PUT THE FOLLOWING: 1) DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2) THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

For: EAST RESOURCES, INC.
By:
Date: 4/11/06

47-043-02039

Ira Hill #2

Treatment : Not stimulated



Well Log : Original TD = 2416'
2416' -4067' Devonian Shale

153

WVDEP OOG Internal Use Only
Rev. 6/14/16

AOR - Well Review Checklist

API Number: 47- 043 - 30996 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 3
Farm Name: T Hill
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2526
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 418 399 Northing: 4,232, 011
Elevation: 331
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-30996

Production First 24 Hours from { Berea Sand Bbls. Approved.
{ Sand Bbls. By Supt.

Ira M. Hill Farm, No. of Lease No. Acres.

Duval District Lincoln County West Virginia State.

Well No. Three Date of Location 19

Rig Commenced 19 } Contractor.
Rig Completed 19 }

Drilling Commenced April 18th. 19 12 } Chamberlin & Company. Contractor.
Drilling Completed June 7th. 19 12 }

CASING RECORD

Size	Charged to Well Feet	In.	Put in Well Feet	In.	Bottom of Casing Feet	In.	Pulled out of Well Feet	In.	Left in Well Feet	In.	Transferred before completion Feet	In.	Left at well not in use Feet	In.
8¼	22		22		22				22					
6/8	1841		1841		1841				1841					

Formation	Top	Bottom	Thickness
Sand	30	600	
Coal	600	602	
Sand	602	885	
Coal	885	887	
Gas Sand	1010	1040	
Salt Sand	1150	1720	
Maxon Sand	1720	1742	
Little Lime	1760	1820	
Pencil Cave	1820	2008	
Big Injun Sand	2008	2080	
Slate	2220	2484	
Shale	2484	2504	
Berea Sand	2504	2526	
Total Depth,		2526	

SHOT RECORD

Month	Day	Yr.	Size Shot	Length of Shell	Top of Shot	Bottom of Shot
6	20	12	90			

REMARKS:

Gas in Salt Sand at 1152'
Water in Salt Sand at 1165' & 1180'
Gas in Pencil Cave at 1965'

Size	Casing Pulled	Casing Left In

REMARKS: EL = 1038.27

47.043 - 30996

FORM OG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

LEASE OR PROPERTY OWNER

ADDRESS

P. J. & L. Supply Company
NAME OF WELL OPERATOR
c/o Hallie Pack, Hamlin, West Virginia
COMPLETE ADDRESS
April 9 19 51

WELL AND LOCATION

Duval District
Lincoln County
Well. No. 3
IRA M. HILL Farm

STATE INSPECTOR SUPERVISING PLUGGING D. E. Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

George Adkins and Leslie J. Adkins 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 Hal Pack, well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 5 day of March, 19 51, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD	FILLING MATERIAL			PLUGS USED	CASING	
FORMATION	CONTENT	FROM	TO	SIZE & KIND	CSG PULLED	CSG LEFT IN
	Bridge Set At	2506'		6-5/8"	500'	1139
	Neat Cement	2506'	2496'	5-3/16"	1252'	None
	Crushed Stone	5'		2"	2526'	None
	Clay		1869'			
	Neat Cement	1869'	1859'			
	Crushed Stone	5'				
	Bridge Set At	1680'				
	Neat Cement	1680'	1670'			
	Crushed Stone	5'				
	Clay		1130'			
	Crushed Stone	5'				
	Bridge Set At	952'				
	Neat Cement	952'	200'			
	Crushed Stone	5' Sealing Coal				
	Clay		632'			
COAL SEAMS	Neat Cement	632'	580'	DESCRIPTION OF MONUMENT		
(NAME)	CrushedStone	5' Sealing Coal				
(NAME)	Clay		350'	Erected Marker According		
(NAME)	Neat Cement	350'	340'	Rule 18, 1931 Regulations		
(NAME)	Crushed Stone	5'				

Clay to Surface

and that the work of plugging and filling said well was completed on the 21 day of March, 19 51.

And further deponents saith not.

Geo Adkins
Leslie J Adkins

Sworn to and subscribed before me this 17 day of April, 19 51.

J. S. Thorpe
Notary Public.

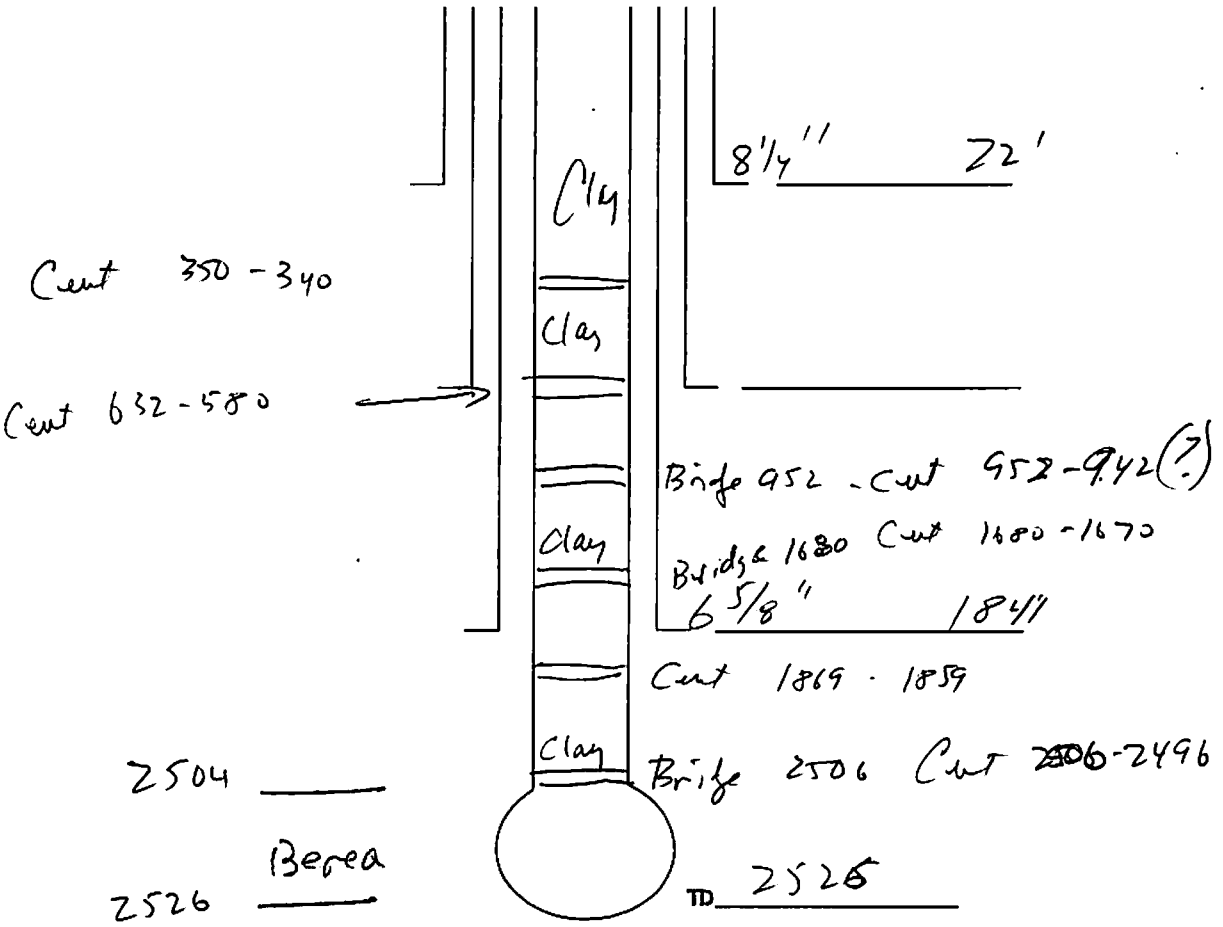
My commission expires:
Aug 1, 1957

Permit No. LIN-996

I Hill

Griffithsville Unit #2 Field

47-043- 30996



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

154

AOR - Well Review Checklist

API Number: 47- 043 - Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 1
Farm Name: Julian Hill
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well:
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 418,398 Northing: 4,231,544
Elevation: 306
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☐

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = 0
Bottom Hole Injection Pressure 0
Hydrostatic Pressure 0

Comments:

35T 38 NA

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

WVDEP OOG Internal Use Only
Rev. 6/14/16

155

AOR - Well Review Checklist

API Number: 47- 043 - Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 2
Farm Name: Julian Hill
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well:
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 418,390 Northing: 4,231,718
Elevation: 310
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☐

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

35 + 38 NA

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

WVDEP OOG Internal Use Only
Rev. 6/14/16

(156)

AOR - Well Review Checklist

API Number: 47- 043 - Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 3
Farm Name: Julian Hill
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well:
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 418,349 Northing: 4,231,904
Elevation: 313
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☐

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

35 7 38 NA

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

WVDEP OOG Internal Use Only
Rev. 6/14/16

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AOR - Well Review Checklist

API Number: 47- 043 - 31029 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: # 1
Farm Name: O Hill
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2236
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 416,808 Northing: 4,232,611
Elevation: 222
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47.043 - 31029

Record of Well No. 3 on Oliver Hall #1 Farm ..... Acres .....
Field. Duval District Lincoln County W. Va.
Big Commenced ..... 19..... Completed ..... 19.....
Drilling Commenced May 15 1907. Completed July 2, 1907.
Cost per foot. 1.25 Contractor, Graham Berlin & Co Address, Huntington, W. Va.
Drillers' Names, J. M. Christopher & J. H. Vanlandingham

CONDUCTOR AND CASING USED IN DRILLING.

Conductor	12 inch	10 inch	8¼ inch	8 inch	7¼ inch	6¼ inch	6¼ inch	5¼ inch	5 3-16 inch	4½ inch
		23		455		1496				

CONDUCTOR AND CASING LEFT IN WELL.

Conductor	12 inch	10 inch	8¼ inch	8 inch	7¼ inch	6¼ inch	6¼ inch	5¼ inch	5 3-16 inch	4½ inch
		23		no		1496				

OIL WELL — GAS WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods		Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure
7-11-07	60 x 3									

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Earth	Floor	13	13	Struck this well will
Sand	13	73	60	make a 20 bbl oil well
Slate	73	85	12	when shot
Sand	85	150	65	J. F. McElroy
Coal	150	152	2	"
Slate	152	175	23	
Sand	175	300	125	Shot 7/6/19 - 10 qts.
Slate	200	320	20	
Sand	320	365	45	
Coal	365	367	2	
Slate	367	375	8	
Sand	375	500	125	
Slate & Shells	500	650	150	
Sand	650	780	130	
Slate	780	820	40	
Salt Sand	820	1484	664	Gas & Water 845 ft
Big Lime	1484	1704	220	Hole filled up at 890 ft
Red Rock	1704	1720	16	
Big Injun	1720	1755	35	
Slate	1755	1815	60	
Slate & Shells	1815	2000	185	
Slate	2000	2188	188	
Shell	2188	2190	2	
Black Slate	2190	2210	20	
Berea Grit	2210	2230	20	All oil-cons got first 12 ft
Slate	2230	2236	6	in sand.
Total Depth of Well		2236		Shot at 2213-2225.

47.043 - 31029

FORM GG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

LEASE OR PROPERTY OWNER

ADDRESS

Hal Pack & Company
NAME OF WELL OPERATOR
Hamlin, West Virginia
COMPLETE ADDRESS
June 13 19 51
WELL AND LOCATION
Duval District
Lincoln County
Well No. 1
Oliver Hill Farm

STATE INSPECTOR SUPERVISING PLUGGING D. E. Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

John McCalister and Delmus Arbaugh 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 Hal Pack well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 6 day of June, 19 51, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD	FILLING MATERIAL			PLUGS USED	CASING	
FORMATION	CONTENT	FROM	TO	SIZE & KIND	CSG PULLED	CSG LEFT IN
	Bridge Set At	2190'		7"	100'	1396'
	Neat Cement	2190'	2180'			
	Crushed Stone	5'				
	Clay		2140'			
	Bridge Set At	1755'				
	Neat Cement	1755'	1745'			
	Crushed Stone	5'				
	Clay		1526'			
	Neat Cement	1526'	1516'			
	Crushed Stone	5'				
	Bridge Set At	900'				
	Neat Cement	900'	890'			
	Crushed Stone	5'				
	Clay		800'			
	Neat Cement	800'	790'			
COAL SEAMS	Bridge Set At	250'		DESCRIPTION OF MONUMENT		
(NAME)	Neat Cement	250'	240'	Erected Marker According		
(NAME)	Crushed Stone	5'		Rule 18, 1931 Regulations		
(NAME)	Clay to Surface					
(NAME)						

JUL 1951
WEST VIRGINIA
DEPARTMENT OF MINES

and that the work of plugging and filling said well was completed on the 9 day of June, 19 51.

And further deponents saith not.

John McCalister
Delmus Arbaugh

Sworn to and subscribed before me this 21 day of June, 19 51

Maud V. Ashworth
Notary Public.

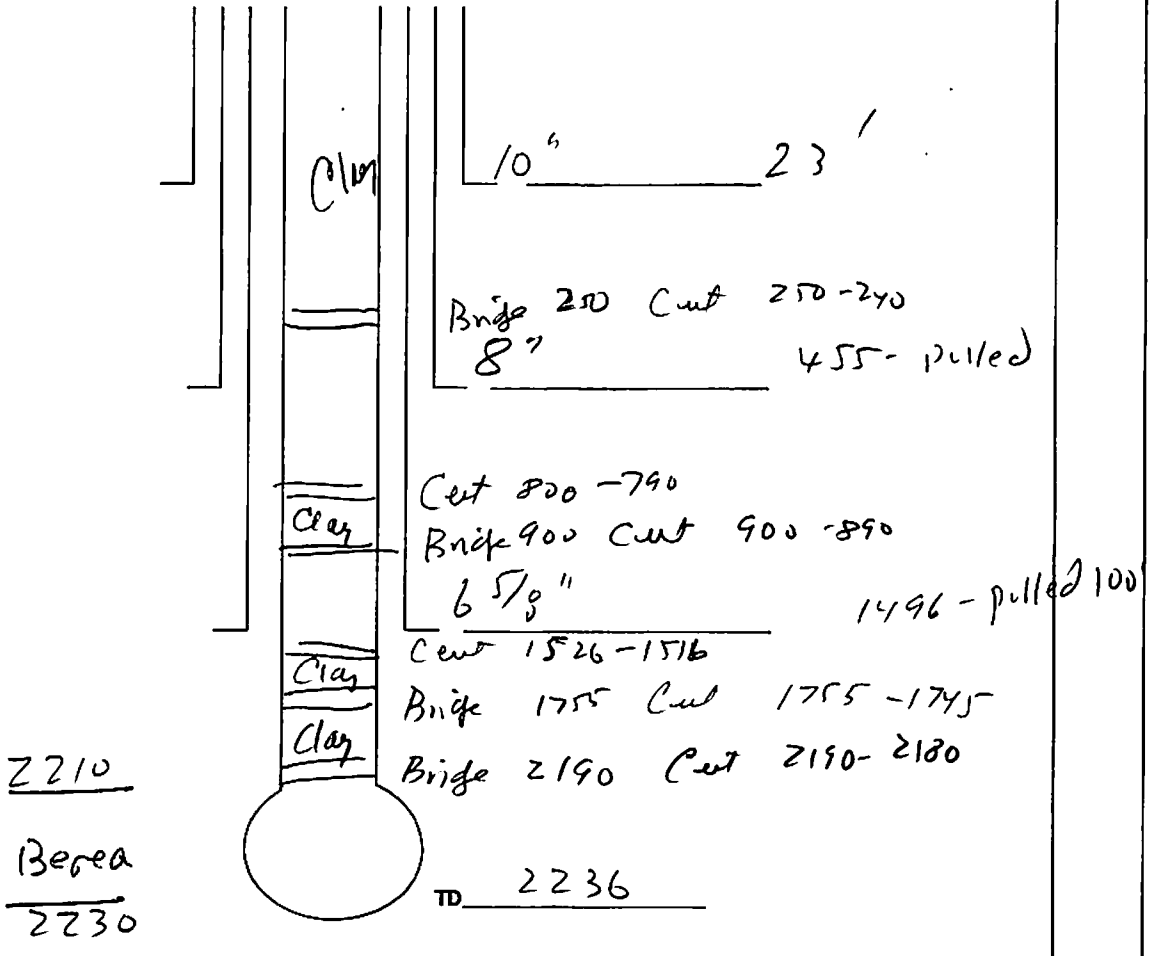
My commission expires:

My Commission Expires March 10, 1960

Permit No. LIN-1029

Griffithsville Unit #2 Field

47-043-



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

AOR - Well Review Checklist

158

API Number: 47- 043 - 02040 Area Permit Number: 2R AP

Operator Name: H6 E

Operator's Well #: 2

Farm Name: [illegible] Hill

Field Name: Grafton/Ellc Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☐ Producer (NonWaterflood) ☒ Observation ☐ Other ☐

Well Status: Active ☐ Abandoned ☐ Plugged ☐

TD of well: 3915

Completion Zones: Dev Shale Perforated Interval: 3377 - 3721

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐

Easting: 416,592 Northing: 4,232,551

Elevation: 819

Inside Field Boundary? ☐ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT: _____	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☒	Yes ☐
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☐	Yes ☒
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**

Bottom Hole Injection Pressure **0**

Hydrostatic Pressure **0**

Comments:

5 1/2" Csg cented abov shot hok
Shot hole cented off before DD
DD to shale 2 7/8" cented over shale

Reviewer Name: _____ Signature: _____

Date Reviewed: _____

** Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

WR-35

State of West Virginia
DEPARTMENT OF ENERGY
Oil and Gas Division

Date January 20, 1988
Operator's
Well No. 2
Farm Oliver Hill
API No. 047- 043 - 2040-DD

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 X / Underground Storage ___ / Deep ___ / Shallow X/)

LOCATION: Elevation: 722.54 Watershed Bear Fork
District: Duval County Lincoln Quadrangle Griffithsville

COMPANY Pennzoil Products Company
ADDRESS PO Box 5519, Vienna, WV 26105-5519
DESIGNATED AGENT James A. Crews
ADDRESS PO Box 5519, Vienna, WV 26105-5519
SURFACE OWNER Hattie Thomas
ADDRESS Lawton, KY 41153
MINERAL RIGHTS OWNER Marjorie Thomas Rabourn
ADDRESS Lawton, KY 41153
OIL AND GAS INSPECTOR FOR THIS WORK Jerry Holcomb ADDRESS Hamlin, WV
PERMIT ISSUED June 16, 1987
DRILLING COMMENCED 9-4-87
DRILLING COMPLETED 9-7-87
IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED ON ___

Casing & Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft.
Size 20-16 Cond.			
13-10"			
9 5/8			
8 5/8			
7	1520'	1520'	(Existing)
5 1/2			
4 1/2			
3			
2-7/8	3909'	3909'	95 sks.
Liners used			

GEOLOGICAL TARGET FORMATION Devonian Shale Depth 3915' feet
Depth of completed well 3915 feet Rotary X / Cable Tools ___
Water strata depth: Fresh ___ feet; Salt 900 feet
Coal seam depths: ___ Is coal being mined in the area? ___

OPEN FLOW DATA
Producing formation Devonian Shale Pay zone depth 3327-3721 feet
Gas: Initial open flow 0 Mcf/d Oil: Initial open flow 0 Bbl/d
Final open flow 40 Mcf/d Final open flow 0 Bbl/d
Time of open flow between initial and final tests ___ hours
Static rock pressure 430 psig (surface measurement) after 116 hours shut in
(If applicable due to multiple completion--)
Second producing formation ___ Pay zone depth ___ feet
Gas: Initial open flow ___ Mcf/d Oil: Initial open flow ___ Bbl/d
Final open flow ___ Mcf/d Oil: Final open flow ___ Bbl/d
Time of open flow between initial and final tests ___ hours
Static rock pressure ___ psig (surface measurement) after ___ hours shut in

(Continue on reverse side)

Oliver Hill #2

47-043-02040

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

Frac: 9-23-87 - 3604-3721 w/250 gal. 15% HCl, 1050 Bbls. 75 quality foam, 40,000# 20/40 sand.

Frac: 10-6-87 - 3327-3464 w/500 gal. 7½% HCl, 820 Bbls. 75 quality foam, 40,000# 20/40 sand.

WELL LOG

FORMATION COLOR HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fre and salt water, coal, oil and g
Original T.D. 2226'			
Devonian Shale	2226'	3915'	

(Attach separate sheets as necessary)

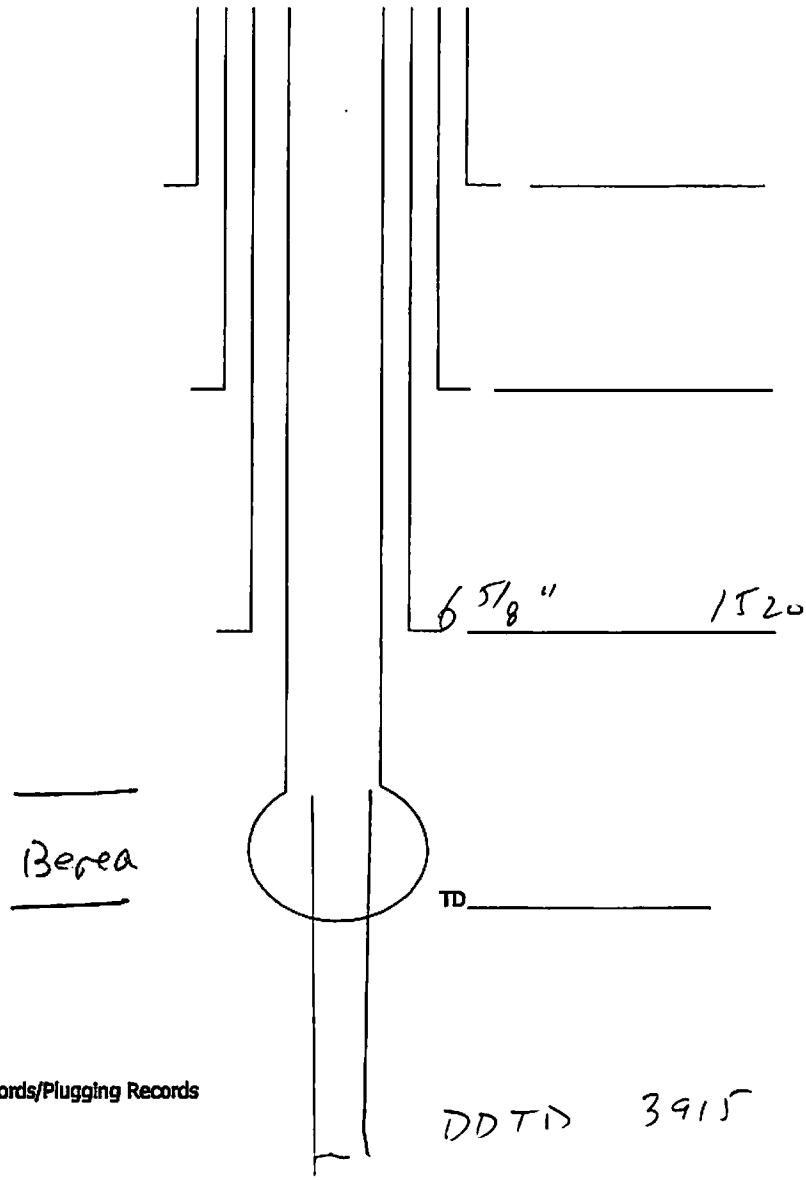
PENNZOIL PRODUCTS COMPANY
Well Operator

By: Curtis A. Lucas
Supervisor, Surveying & Mapping
Date: January 20, 1988

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."

Griffithsville Unit #2 Field

47-043- 02040



From Drillers Records/Plugging Records

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WVDEP OOG Internal Use Only
Rev. 6/14/16

AOR - Well Review Checklist

API Number: 47- 043 - 31036 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 3
Farm Name: Oliver Hill
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2410
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 416,604 Northing: 4,232,767
Elevation: 277
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:
Date Reviewed:

** Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-31036

Record of Well No. 3 on C. Hall Farm ____ Acres Gas Estate
Ville Field, Dunn District Lincoln County ____
Rig Commenced ____ 19__, Completed ____ 19__
Drilling Commenced March 5th 1909, Completed April 29th 1909
Cost per foot. 12½ Contractor, Wells Bros Address, Spencer, W. Va.
Drillers' Names, Jos Alderson and Jack Donigan

CONDUCTOR AND CASING USED IN DRILLING.

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7½ Inch	6¼ Inch	6¼ Inch	5¼ Inch	5 3/16 Inch	4½ Inch
12½						1722				

CONDUCTOR AND CASING LEFT IN WELL.

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7½ Inch	6¼ Inch	6¼ Inch	5¼ Inch	5 3/16 Inch	4½ Inch
12½						1722				

OIL WELL — GAS WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods		Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure
5/1	90 qts	22 Mcf	1 1/4	3 5/8	32	1 1/4	1203	1203		

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Sand		12	12	
Slate	12	19	7	
Red Rock	19	35	16	
Sand	35	90	55	
Red Rock	90	150	60	
Slate	150	220	70	Little water at 140 ft.
Sand	220	245	25	
Slate	245	260	15	2 Barrels water at 450 ft.
Sand	260	340	80	
Slate	340	365	25	Showing Gas at 1075
Lime	365	407	42	
Sand	407	510	103	Hole filled full water
Lime Shells	510	550	40	water at 1065
Sand	550	640	90	
Slate	640	657	17	
Coal	657	661	4	
Slate	661	695	34	
Sand	695	725	30	
Slate	725	745	20	
Sand	745	855	110	
Slate	855	900	45	
Sand	900	930	30	
Lime	930	952	22	
Sand	952	995	43	
Slate	995	1003	8	
Lime	1003	1015	12	
Salt Sand	1015	1670	655	
Black Lime	1670	1712	42	
Pencil Cave	1712	1715	3	
Little Lime	1715	1885	170	
Lime Sand	1885	1970	85	
Slate	1970	2030	60	Formation

41043 - 31036

Record of Well No. ... on ... Farm ... Acres ...

... Field. ... District ... County ...

Rig Commenced ... 19... Completed ... 19...

Drilling Commenced ... 19... Completed ... 19...

Cost per foot. ... Contractor. ... Address. ...

Drillers' Names. ...

CONDUCTOR AND CASING USED IN DRILLING.

	13 inch	10 inch	8¼ inch	8 inch	7⅝ inch	6⅝ inch	6¼ inch	5½ inch	5 9-16 inch	4½ inch
Conductor										

CONDUCTOR AND CASING LEFT IN WELL.

	13 inch	10 inch	8¼ inch	8 inch	7⅝ inch	6⅝ inch	6¼ inch	5½ inch	5 9-16 inch	4½ inch
Conductor										

OIL WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods

GAS WELL

Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure

FORMATION	TOP	BOTTOM	THICKNESS
O. Hick # 2 Continued -			
Sand & Shells	2030	2140	110
Slate	2140	2230	90
Lime	2230	2255	25
Slate	2255	2360	105
Black Shale	2360	2386	26
Big Sand	2386	2407	21
Slate	2407	2410	3

REMARKS

47-043-3103C

FORM OG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

LEASE OR PROPERTY OWNER

ADDRESS

U. S. H. Supply Co.
NAME OF WELL OPERATOR

Gritts ville, W. Va.
COMPLETE ADDRESS

May 30, 1952

WELL AND LOCATION

Duval District

Lincoln County

Well No. 3

Other Farm

STATE INSPECTOR SUPERVISING PLUGGING Chas. B. Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

and

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 U. S. H. Supply Co., well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 28 day of Nov., 19 51, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD	FILLING MATERIAL	PLUGS USED	CASING	
FORMATION	Set per. brid. @ 2365'	SIZE & KIND	CSG PULLED	CSG LEFT IN
	2 bags cement	7"	1722'	none
	5' c rushed stone	2" tubing @ 2359'		none
	fill hole w/ clay 2350' to 2220'			
	neat cement 2220' to 2010'			
	set bridge 1970'			
	2 bags cement			
	5' crushed stone			
	filled w/ clay 1953' to 1753'			
	neat cement 1752' to 1743'			
	crushed stone 5'			
	set bridge 1650'			
	2 bags cement			
	5' crushed stone			
	filled w/ clay 1135' to 285'			
	neat cement 285' to 275'			
	set bridge 250'			
	2 bags cement			
	5' crushed stone			
	filled w/ clay to surface			
COAL SEAMS		DESCRIPTION OF MONUMENT		
(NAME)		Metal marker according to		
(NAME)		rule 38, 1931 regulations.		
(NAME)				
(NAME)				

MAY 1952
WEST VIRGINIA
DEPARTMENT OF MINES

and that the work of plugging and filling said well was completed on the 12 day of Dec., 19 51

And further deponents saith not.

S. S. Stephens
E. G. Bechel

Sworn to and subscribed before me this 14 day of May, 19 52

J. R. Stevens
Notary Public.

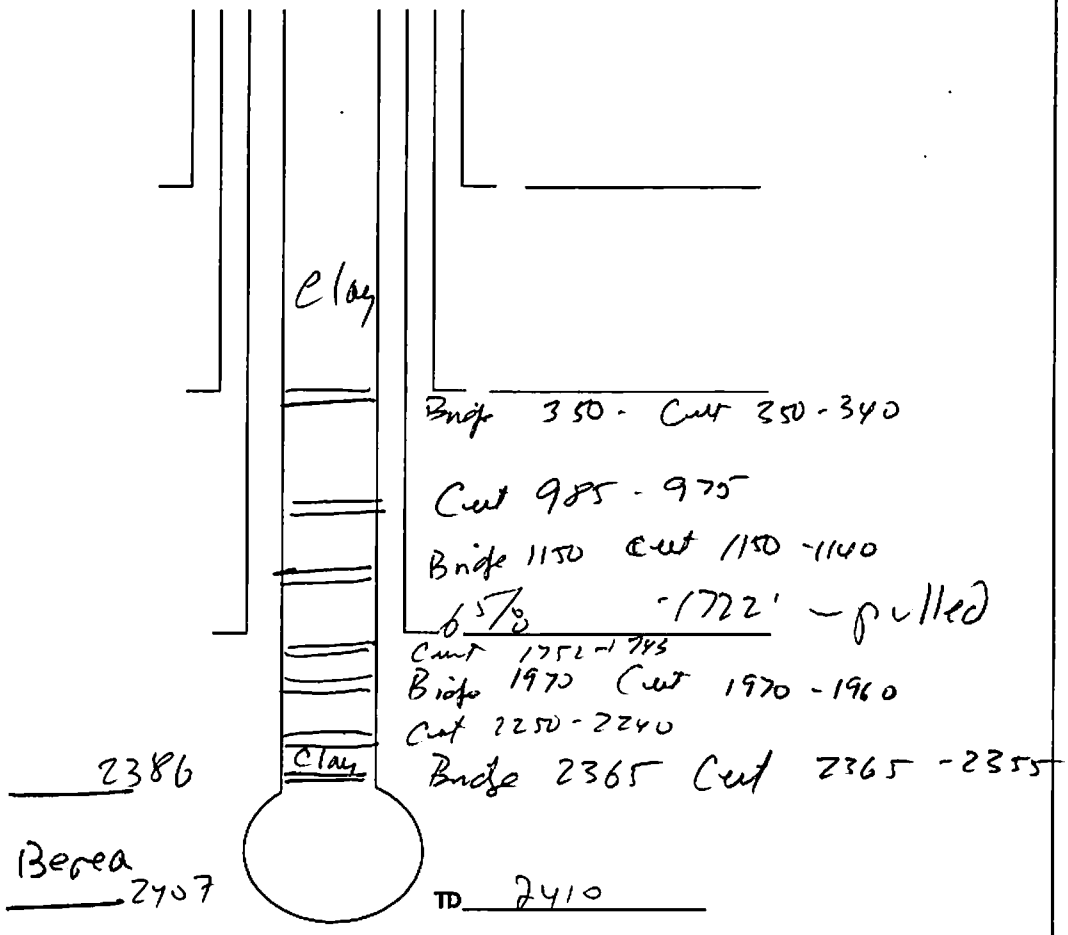
My commission expires: Oct-9-1957

Permit No. Lin-2035

O #113

Griffithsville Unit #2 Field

47-043- 31036



From Drillers Records/Plugging Records

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WVDEP OOG Internal Use Only
Rev. 6/14/16

AOR - Well Review Checklist

API Number: 47- 043 - 30037 Area Permit Number: 2R AP

Operator Name: H 6 Energy

Operator's Well #: 4

Farm Name: O Hill

Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐

Well Status: Active ☐ Abandoned ☐ Plugged ☒

TD of well: 2542

Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐

Easting: 417, 484 Northing: 4,232,682

Elevation: 313

Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐	
Date of Last MIT:	Passed?	No ☐	Yes ☐	
Open Hole Completion		No ☐	Yes ☒	
Well penetrates injection zone?		No ☐	Yes ☒	
Well perforated in injection zone?		No ☒	Yes ☐	
Cemented across injection zone?		No ☒	Yes ☐	
Packer immediately above injection zone (<100')?		No ☐	Yes ☐	No Packer ☐
		If No: Provide Depth:		
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒	

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = 0

Bottom Hole Injection Pressure 0

Hydrostatic Pressure 0

Comments:

Reviewer Name: Signature:

Date Reviewed:

** Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-31037

Record of Well No. 4 on C. Hall Farm ..... Acres 5 Gauley

Well Field. Burnt District Lincoln County

Rig Commenced ..... 19..... Completed ..... 19.....

Drilling Commenced Aug 6 1904. Completed Sept 15 1904

Cost per foot. 1.10 Contractor, Linder Bros. Address, Linden W.Va.

Driller's Names. John Hazen & Silas Hazen

CONDUCTOR AND CASING USED IN DRILLING.

	13 inch	10 inch	8¼ inch	8 inch	7¼ inch	6¼ inch	6¼ inch	6¼ inch	5 inch	4½ inch
Conductor						1850				
7										

CONDUCTOR AND CASING LEFT IN WELL.

	13 inch	10 inch	8¼ inch	8 inch	7¼ inch	6¼ inch	6¼ inch	6¼ inch	5 inch	4½ inch
Conductor						1850				

OIL WELL — GAS WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods		Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure
9/11		Water	2½ Inch	3/8	Shot	4½	1500	2		
9/11			1460	1500	8			REMARKS		

FORMATION	TOP	BOTTOM	THICKNESS	
Soil	0	9	9	Elev.
Sand	9	200	191	
Slate	200	230	30	450 ft. 10" hole drilled
Sand	230	270	40	1100 8" casing pulled
Slate	270	320	50	
Sand	320	360	40	Gas in sand at 1175'
Slate	360	400	40	
Sand	400	420	20	Hole filled up at 1200'.
Slate	420	424	4	
Coal	424	450	26	
Sand	450	490	40	
Slate	490	550	60	
Sand	550	600	50	
Slate	600	670	70	
Sand	670	700	30	
Slate	700	800	100	
Sand	800	900	100	
Slate	900	940	40	
Sand	940	1135	195	
Little Lime	1135	1810	675	
Pencil Cave	1810	1840	30	
Big Lime	1840	1845	5	
Keener Sand	1845	2015	170	
Big Injun Sand	2015	2080	65	
Slate Shale	2080	2521	441	
Berea Sand	2521	2542	21	
Total Depth	2542			

47.043 - 31037

FORM GG-6

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER: _____
ADDRESS: _____
COAL OPERATOR OR OWNER: _____
ADDRESS: _____
LEASE OR PROPERTY OWNER: _____
ADDRESS: _____

NAME OF WELL OPERATOR: G. S. H. Supply Co.
COMPLETE ADDRESS: Griffithsville, W. Va.
WELL AND LOCATION: Feb. 26, 19 52
Duval District
Lincoln County
Well No. 1
Oliver Hill Farm
STATE INSPECTOR SUPERVISING PLUGGING: Dana B. Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

and _____ 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 G. S. H. Supply Co., well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 10 day of Sept, 1951, and that the well was plugged and filled in the following manner:

BAND OR ZONE RECORD	FILLING MATERIAL	PLUGS USED	CASING	
FORMATION		SIZE & KIND	CSG PULLED	CSG LEFT IN
	Set bridge 2500'			
	2 bagscement 2500' to 2490'	7"	1850'	none
	crushed s tone 5'	5"	1682'	none
	filled w/clay to 2485' to 2480'			
	neat cement 2480' to 2390'			
	set bridge 2080'			
	2 bags cement 2080' to 2070'			
	crushed stone 5'			
	filled with clay 2055' to 1980'			
	neat cement 1980' to 1970'			
	crushed stone 5'			
	set bridge at 1395'			
	2 bags neat cement 1395' to 1385'			
	Crushed stone 5'			
	filled with clay 1205' to 1115'			
	neat cement 1115' to 1105'			
	set per. Bridge 50'			
	2 bags neat cement 1055' to 1045'			
	crushed stone 5'			
COAL SEAMS	filled with clay to surface	DESCRIPTION OF MONUMENT		
(NAME)		Erected markeraccording to rule		
(NAME)		18, 1931 regulation.		
(NAME)				
(NAME)				

and that the work of plugging and filling said well was completed on the 15 day of Sept, 1951

And further deponents saith not.

E. S. Stephenson Jr.

Sworn to and subscribed before me this 14 day of May, 1952

J. R. Osborne
Notary Public.

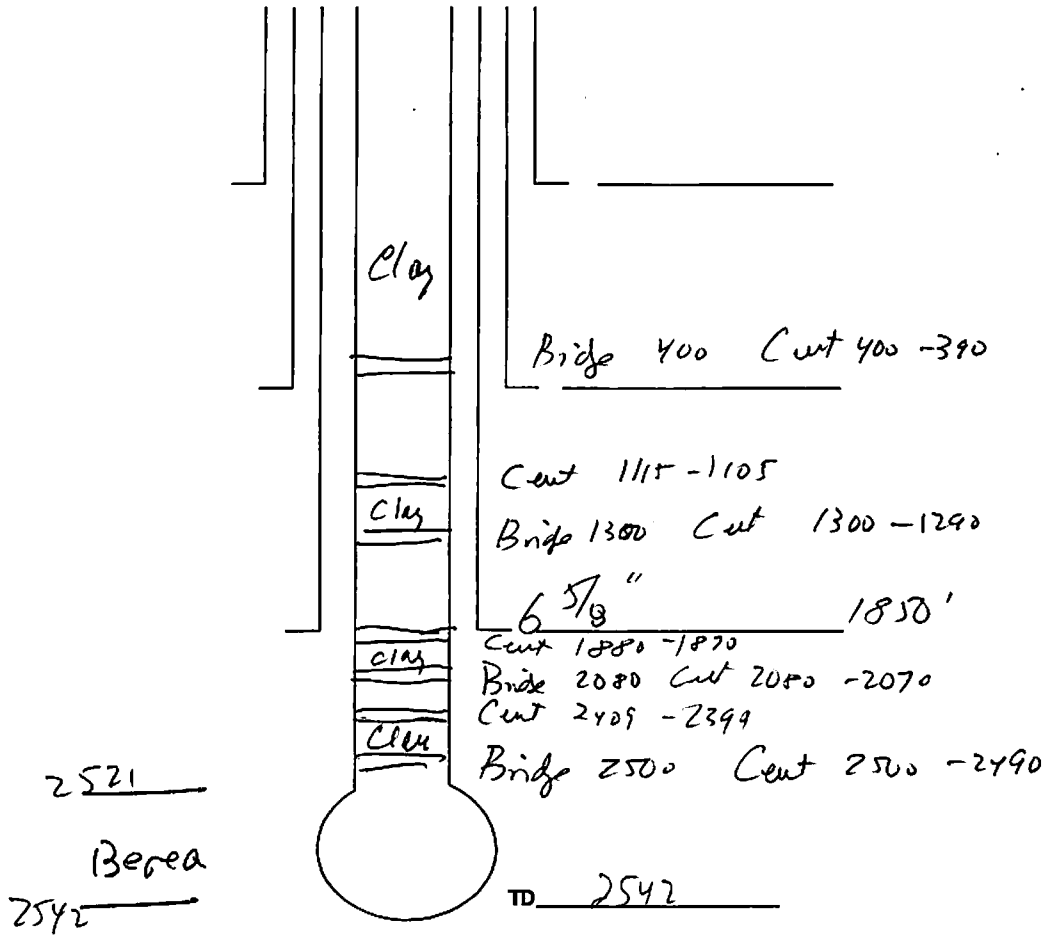
My commission expires: Oct-7-1957

Permit No. Lin-1037

OHIO

Griffithsville Unit #2 Field

47-043- 31037



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

(161)

AOR - Well Review Checklist

API Number: 47- 043 - 3/038 Area Permit Number: 2R AP

Operator Name: H 6 Energy

Operator's Well #: 8

Farm Name: O Hill

Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐

Well Status: Active ☐ Abandoned ☐ Plugged ☒

TD of well: 7370

Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐

Easting: 416,961 Northing: 4,232,399

Elevation: 262

Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐	
Date of Last MIT:	Passed?	No ☐	Yes ☐	
Open Hole Completion		No ☐	Yes ☒	
Well penetrates injection zone?		No ☐	Yes ☒	
Well perforated in injection zone?		No ☒	Yes ☐	
Cemented across injection zone?		No ☒	Yes ☐	
Packer immediately above injection zone (<100')?		No ☐	Yes ☐	No Packer ☐
		If No: Provide Depth:		
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒	

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = 0

Bottom Hole Injection Pressure 0

Hydrostatic Pressure 0

Comments:

Reviewer Name: Signature:

Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-31038

Record of Well No. 5 on Clark Heirs Farm ... Acres ...
... Field, ... District ... County, ...
Rig Commenced ... 19..., Completed ... 19...
Drilling Commenced Nov 22 1909, Completed Jan 31 1910
Cost per foot, 1.10 Contractor, Wells Bros Address, ...
Drillers' Names, Sam Sylvester & Jas Lockhart

CONDUCTOR AND CASING USED IN DRILLING.

Conductor	13 inch	10 inch	8¼ inch	8 inch	7⅝ inch	6⅝ inch	6¼ inch	5¾ inch	5 3-16 inch	4½ inch
14						1665'				

CONDUCTOR AND CASING LEFT IN WELL.

Conductor	13 inch	10 inch	8¼ inch	8 inch	7⅝ inch	6⅝ inch	6¼ inch	5¾ inch	5 3-16 inch	4½ inch
14						1665'				

OIL WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods
1/10	90qts			

GAS WELL

Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Soil		14	14	
Sand	14	70	56	1st Coal 855'
Shale	70	225	155	natural hole 9 in. 10"
Sand	225	355	130	to 8" at 336'
Shale	355	370	15	
Sand	370	440	70	Salt water at Sand & Sand
Shale	440	455	15	water at 1035'
Sand	455	585	130	
Shale	585	610	25	5th Coal at 1410
Sand	610	690	80	
Shale	690	705	15	Drilling into Maxton sand 24"
Sand	705	800	95	
Shale	800	870	70	Top of Berea sand, marked
Sand	870	910	40	Jan 11 - 1410 Salt Water
Shale	910	930	20	Jan 31 - 1910
Lime	930	945	15	
Salt Sand	945	1605	660	
Shale	1605	1615	10	
Big Lime	1615	1650	35	
Keener Lime	1650	1655	5	
Big Lime	1655	1835	180	
Big Injun Sand	1835	1900	65	
Base Shale	1900	2325	425	
Brim Shale	2325	2346	21	
Brim Sand	2346	2367	21	
Pebble	2367	2370½	3½	

47.043 - 31038

FORM OG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

LEASE OR PROPERTY OWNER

ADDRESS

NAME OF WELL OPERATOR: G. S. H. Supply Co

COMPLETE ADDRESS: Griffithsville, W. Va.

February 2, 52 19

WELL AND LOCATION

Duval District

Lincoln County

Well. No. 5

Olivier Hill Farm

STATE INSPECTOR SUPERVISING PLUGGING: Dana E. Lemon

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

[illegible] and T. D. Thornton

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 G. S. H. Supply Co well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 3 day of December, 19 51, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD	FILLING MATERIAL			PLUGS USED	CASING	
FORMATION	CONTENT	FROM	TO	SIZE & KIND	CSG FILLED	CSG LEFT IN
	Pur. bridge	2320'		7"	1665	4112
	Neat cement	2320'	2316'			
	crushed stone	5'				
	clay filled	2311'	[illegible]			
	neat cement	2226'	2216'			
	Pur. bridge	1900'				
	Neat cement	1937'	1890'			
	crushed stone	5'				
	filled clay	[illegible]	[illegible]			
	Neat cement	1695'	2695'			
	Crushed stone	5'				
	Pur. bridge	1150'				
	Neat cement	1140'	1140'			
	crushed stone	5'				
	clay filled	1135'	925'			
	Neat cement	925'	915'			
	Pur. bridge	350'				
	Neat cement	350'	340'			
COAL SEAMS	Crushed stone	5ft		DESCRIPTION OF MONUMENT		
(NAME)	filled with clay to surface			Erected marker, according to		
(NAME)				rule 18, 1931 regulations.		
(NAME)						
(NAME)						

and that the work of plugging and filling said well was completed on the 13 day of December, 19 51

And further deponents saith not.

C. M. Ballistes
T. D. Thornton

Sworn to and subscribed before me this 3 day of Feby, 19 52

J. L. Graham
Notary Public.

My commission expires: Oct 7 1959

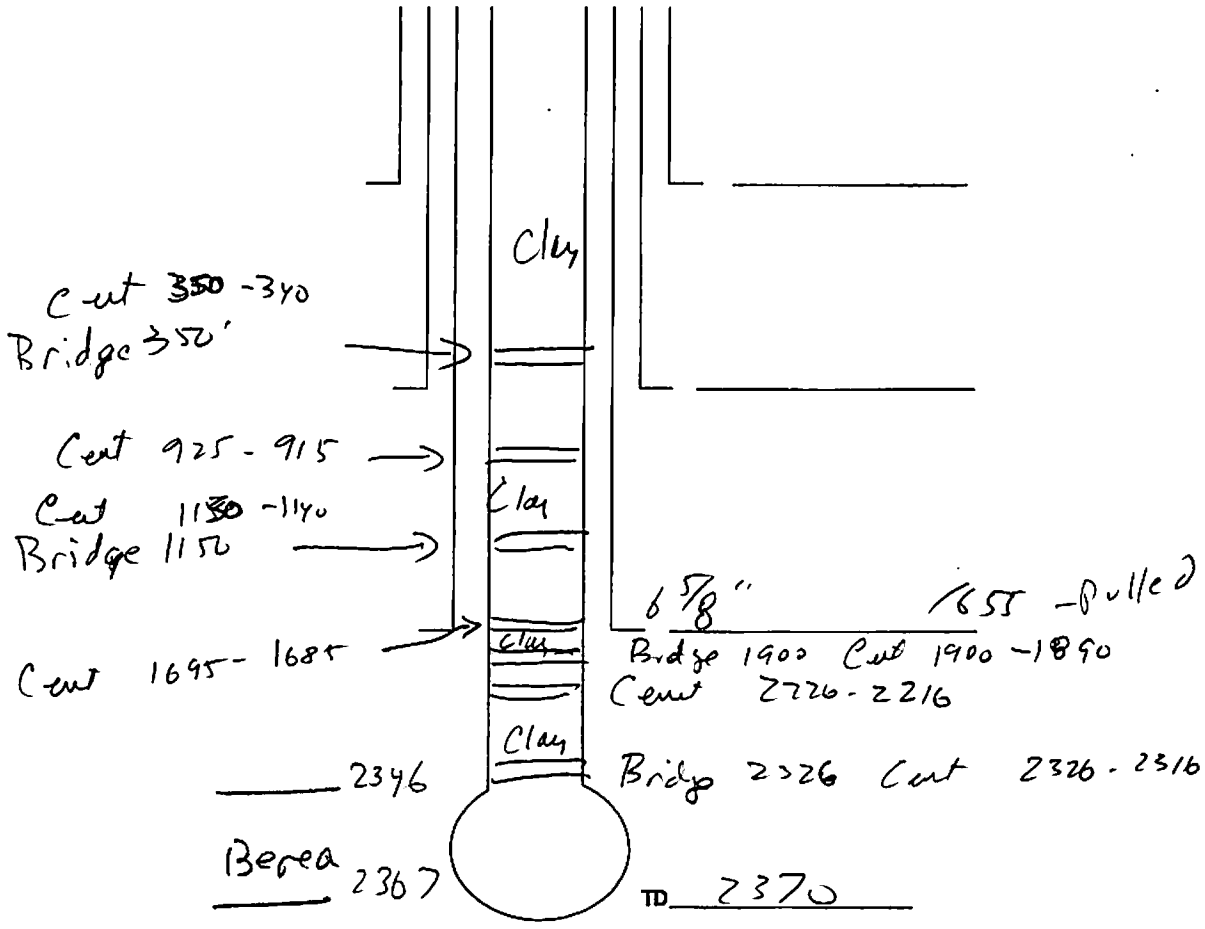
Permit No. Lin.- 1038

FEB 1952
WEST VIRGINIA
DEPARTMENT OF MINES

O Hill 5

Griffithsville Unit #2 Field

47-043- 31038



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

(162)

AOR - Well Review Checklist

API Number: 47- 043 -
Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 6
Farm Name: O Hill
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well:
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 417,369 Northing: 4,232,662
Elevation: 282
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☐

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

WR 38 NA

Reviewer Name: Signature:
Date Reviewed:

** Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

Record of Well No. 6 on Oliver Hill Farm Acres Unknown

ville Field, Duval District Lincoln County, Wirt Co. W.

Rig Commenced ..... 10..... Completed ..... 10.....

Drilling Commenced May 12 1910. Completed June 22 1910

Cost per foot, 1.10 Contractor, Wm Bradley & Bro. Address, Parkersburg, W.Va.

Drillers' Names, E.G. Wm Miller & Jas. Dunnigan

CONDUCTOR AND CASING USED IN DRILLING.

	13 inch	10 inch	8¼ inch	8 inch	7¼ inch	6¼ inch	6¼ inch	5¼ inch	5 inch	4¼ inch
Conductor		16				1738'				

CONDUCTOR AND CASING LEFT IN WELL.

	13 inch	10 inch	8¼ inch	8 inch	7¼ inch	6¼ inch	6¼ inch	5¼ inch	5 inch	4¼ inch
Conductor		16				1738'				

OIL WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods		Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure
6/23/10	90 qts.									

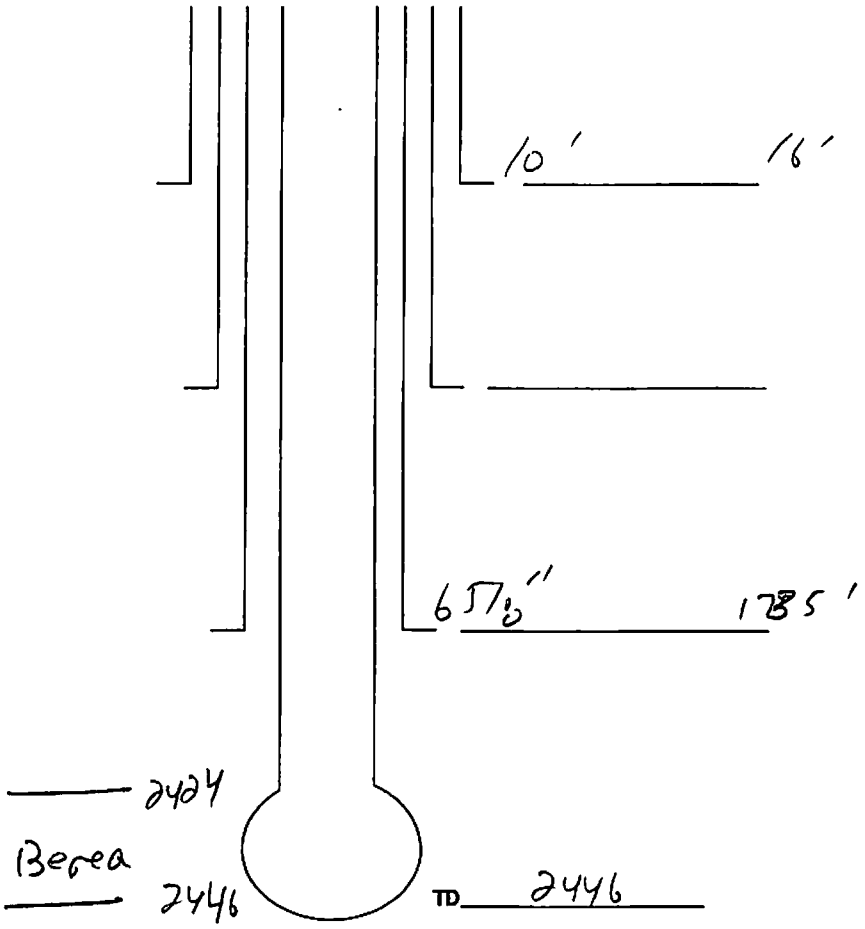
GAS WELL

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Red Rock		15	15	El=9
Sand & Shells	15	150	135	
Coal	150	315	165	
Sand & Shells	315	320	5	
Coal	320	700	380	Salt Water at 330'
Sand & Shells	700	1060	360	
Coal	1060	1080	20	
Sand & Shells	1080	1686	606	Gas at 1085'
Coal	1686	1690	4	Water at 1100'
Little Lime	1690	1721	31	
Pencil Cave	1721	1725	4	
Big Lime	1725	1900	175	
Keener Sand	1900	1975	75	
Slate & Shells	1975	2080	105	
Sand & Shells	2080	2200	120	
Slate & Shells	2200	2405	205	
Berea Grit	2405	2424	19	
Berea Sand	2424	2446	22	Oil 2428

O #116

Griffithsville Unit #2 Field

47-043-



From Drillers Records/Plugging Records

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WVDEP OOG Internal Use Only
Rev. 6/14/16

AOR - Well Review Checklist

API Number: 47- 043 - 30573 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 7
Farm Name: O Hill
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2577
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 416,465 Northing: 4,232,966
Elevation: 325
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**

Bottom Hole Injection Pressure **0**

Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:

Date Reviewed:

** Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47.043 - 30573

Record of Well No. 7 on Olive Hill Farm Acres

Field, District County,

Rig Commenced 19 Completed 19

Drilling Commenced June 17 1911 Completed Aug 16 1911

Cost per foot, 1.25 Contractor Gourley & Ferguson Drlg Co Address, Gourley, W. Va.

Drillers' Names, A. J. LeBrane & Guy Loudell

CONDUCTOR AND CASING USED IN DRILLING.

Conductor	13 inch	10 inch	8¼ inch	8 inch	7¼ inch	6⅝ inch	6¼ inch	5¼ inch	5 5-16 inch	4¼ inch
16						1886				

CONDUCTOR AND CASING LEFT IN WELL.

Conductor	13 inch	10 inch	8¼ inch	8 inch	7¼ inch	6⅝ inch	6¼ inch	5¼ inch	5 5-16 inch	4¼ inch
16						1886				

OIL WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Casing		Size of Packer	Depth Set	GAS WELL Tubing	1st 5 Minute Pressure	Rock Pressure
8/7/11	90 qts.									

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Soil & Clay		16	16	
Red Rock	16	76	60	Cased 24' in Big Lime
Slate	76	126	50	
Sand	126	166	40	528' 10" hole
Slate	166	256	90	
Sand	256	316	60	
Slate	316	476	160	
Sand	476	520	44	Hole full of water at 1242
Coal	520	524	4	
Slate & Sand	524	1140	616	
Slate	1140	1180	40	
Slate & Sand	1180	1825	645	
Slate	1825	1827	2	
Little Lime	1827	1857	30	
Pencil Cave	1857	1862	5	
Big Lime	1862	2042	180	
Big Injun	2042	2127	85	
Slate	2127	2197	70	
Lime Sheels	2197	2272	75	
Sand	2272	2307	35	
Slate	2307	2537	230	
Brown Shale	2537	2557	20	
Berea Sand	2557	2577	20	

47-043 - 30573

FORM 08-G

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE. ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

South Penn Natural Gas Co.
LEASE OR PROPERTY OWNER

Parkersburg, W. Va.
ADDRESS

C. H. DeLay
NAME OF WELL OPERATOR

P. O. Box 49 Hamlin, W. Va.
COMPLETE ADDRESS

March 3, 1949
WELL AND LOCATION

Duval District

Lincoln County

Well No. 7

C. Hill Farm

STATE INSPECTOR SUPERVISING PLUGGING W. A. BRYAN

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

C. H. DeLay and Bethel Wade

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 C. H. DeLay well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 2 day of February, 1949, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD	FILLING MATERIAL			PLUGS USED	CASING	
FORMATION	CONTENT	FROM	TO	SIZE & KIND	CSG PULLED	CSG LEFT IN
	Red Clay	2577	2500			
	Cement	2500	2490			
	Stone	2490	2485			
	Clay	2485	1916			
	Cement	1916	1906			
	Stone	1906	1901			
Pulled casing loose and cut as hole ma				filled	5-5/8	1886
Permanent Bridge		1505	1500			
	Cement	1500	1490			
	Stone	1490	1485			
	Clay	1485	1160			
	Cement	1160	1150			
Permanent	Bridge	355	350			
	Cemnt	350	340			
	Stone	340	335			
COAL SEAMS	Filled with clay to surface			DESCRIPTION OF MONUMENT		
(NAME)				18"X18"X30" concrete block		
(NAME)				February 8, 1949		
(NAME)						
(NAME)						

and that the work of plugging and filling said well was completed on the 8 day of February, 1949.

And further deponents saith not.

C. H. DeLay

Sworn to and subscribed before me this 18 day of Apr., 1949.

B. F. Spurlock
Notary Public.

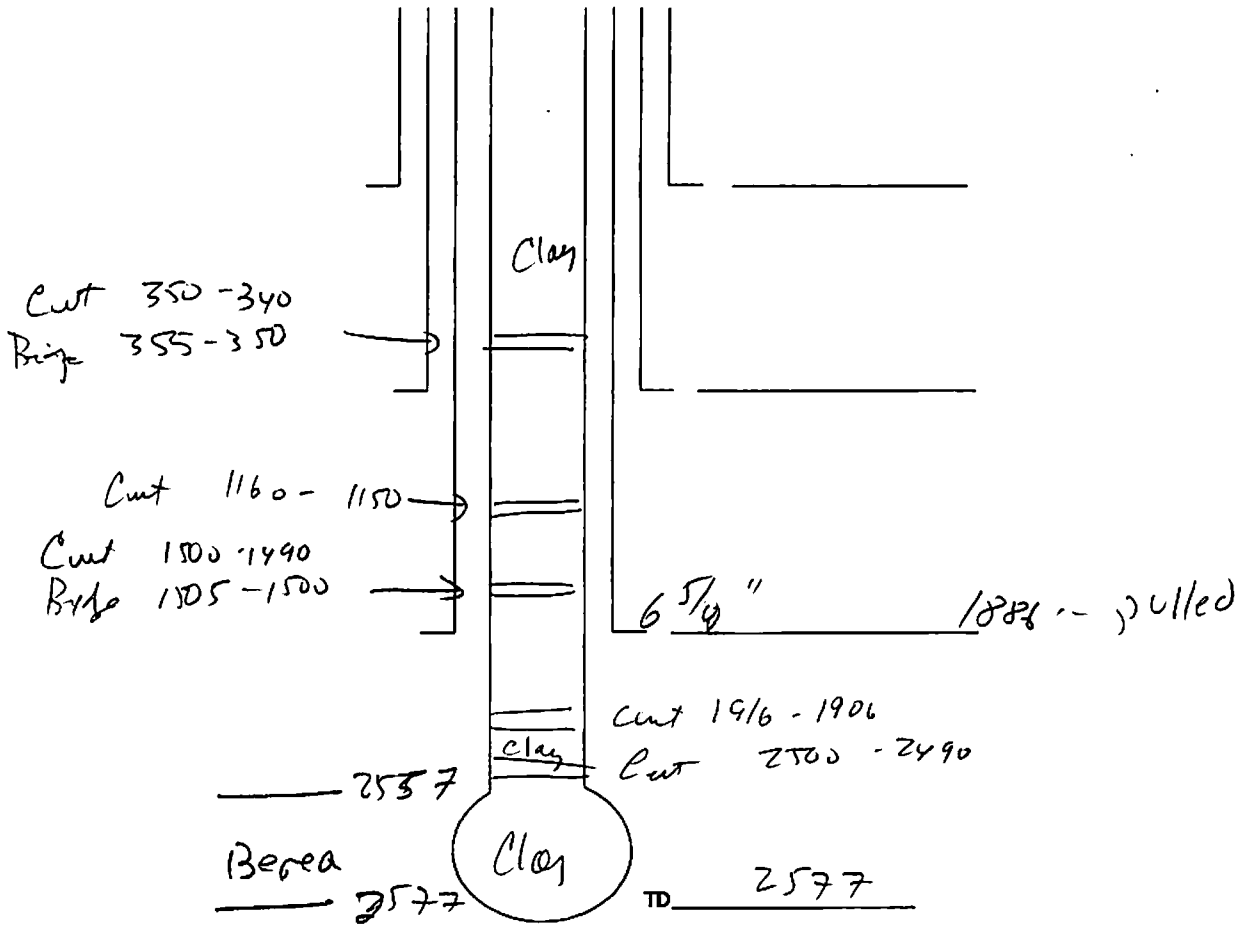
My commission expires: Aug. 16 - 1949

Permit No. Lin-573

OHio 7

Griffithsville Unit #2 Field

47-043- 30573



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

(164)

AOR - Well Review Checklist

API Number: 47- 043 - 30583 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: B
Farm Name: D Hill
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2445
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 416,754 Northing: 4,233,089
Elevation: 294
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = 0
Bottom Hole Injection Pressure 0
Hydrostatic Pressure 0

Comments:

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-30583

RECORD of Well No. 8 on Oliver Hill Farm Acres
Field, District County
Rig Commenced 19 , Completed 19
Drilling Commenced Dec 11 1911 , Completed June 22 1912
Cost per foot, 1.15 Contractor, Hawley & Inman Drlg Co Address, Hawley, W. Va.
Drillers' Names, A. J. Lockhard & Guy Loudell

CONDUCTOR AND CASING USED IN DRILLING

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7¼ Inch	6¼ Inch	6¼ Inch	5¼ Inch	3 3-16-Inch	4¼ Inch
14						1750				

CONDUCTOR AND CASING LEFT IN WELL

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7¼ Inch	6¼ Inch	6¼ Inch	5¼ Inch	3 3-16 Inch	4¼ Inch
14						1750				

OIL WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods
1/26/12	80 qts			

GAS WELL

Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Wind		14	14	Based 10' in Big Lime
Red Rock	14	160	146	
Sand	160	190	30	
Slate	190	250	60	
Sand	250	320	70	350' of 10" hole
Slate	320	353	33	
Sand	353	390	37	
Coal	390	394	4	
Slate	394	459	65	
Sand	459	659	200	
Slate	659	719	60	Hole full of Water at 1120
Sand	719	934	215	
Slate	934	1055	121	
Salt Sand	1055	1595	540	Shot 1/4/12 - 85 qts - Berea
				" 6/21/26 - 150 qts
Slate	1595	1601	6	
Maxon Sand	1601	1696	95	
Slate	1696	1701	5	
Little Lime	1701	1736	35	
Pencil Cave	1736	1740	4	
Big Lime	1740	1925	185	
Big Injun	1925	1990	65	
Slate	1990	2080	90	
Shells	2080	2150	70	
Little Shells	2150	2185	35	
Slate	2185	2394	209	
Brown Shale	2394	2424	30	
Berea Sand	2424	2445	21	

47.043-30583

FORM OG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

South Penn Natural Gas Co.
LEASE OR PROPERTY OWNER

Parkersburg, W. Va.
ADDRESS

O. K. DeLay
NAME OF WELL OPERATOR

P. O. Box 49 Hamlin, W. Va.
COMPLETE ADDRESS

March 8, 1949
WELL AND LOCATION

Duval District

Lincoln County

Well No. 8

O. Hill Farm

D. E. Lawson

STATE INSPECTOR SUPERVISING PLUGGING

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

O. K. DeLay and Bethel Wade 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 O. K. DeLay well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 12 day of February, 1949, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD	FILLING MATERIAL			PLUGS USED	CASING	
FORMATION	CONTENT	FROM	TO	SIZE & KIND	CSG PULLED	CSG LEFT IN
	Bridge	2405	2400			
Permanent	Cement	2400	2390			
	Stone	2390	2385			
	Clay	2385	2300			
	Cement	2300	2290			
Permanent	Bridge	2025	2020			
	Cement	2020	2010			
	Stone	2010	2005			
	Red Clay	2005	1780			
	Cement	1780	1770			
	Stone	1770	1765			
Pulled casing loose and out as hole was filled					6-5/8"	1750
Permanent	Bridge	1505	1500			
	Cement	1500	1490			
	Stone	1490	1485			
	Clay	1485	1035			
	Cement	1035	1025			
Permanent	Bridge	355	350			
	Cement	350	345			
	Stone	345	335			
	Filled with clay to surface					

COAL SEAMS

	DESCRIPTION OF MONUMENT
(NAME)	18"X18"X30" Concrete Block
(NAME)	February 18, 1949
(NAME)	
(NAME)	

and that the work of plugging and filling said well was completed on the 18 day of February, 1949.

And further deponents saith not.

O. K. DeLay

Sworn to and subscribed before me this 18 day of April, 1949.

T. E. Lawson
Notary Public.

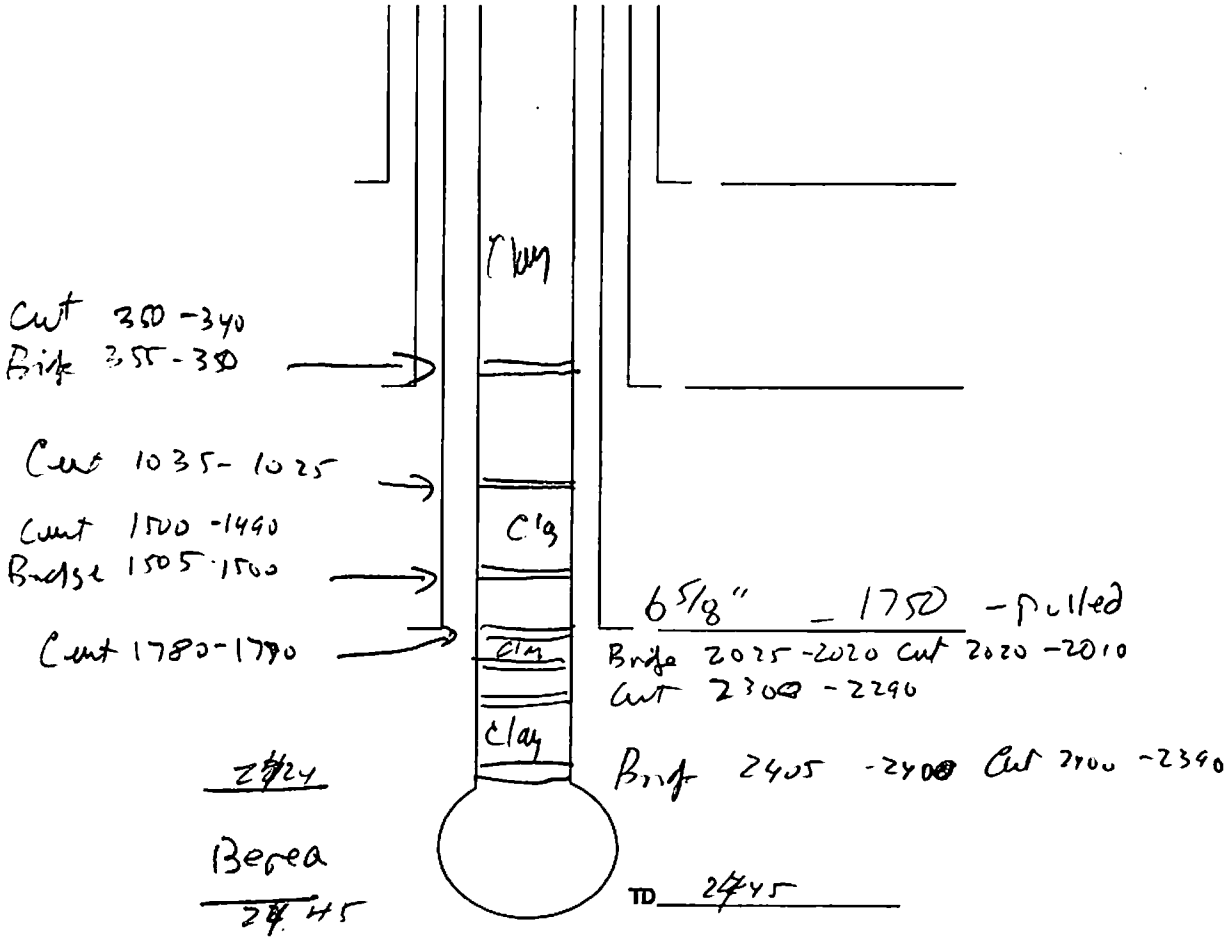
My commission expires:
Aug. 16-1949

Permit No. A 122-583

6 4/11 8

Griffithsville Unit #2 Field

47-043- 30583



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

165

AOR - Well Review Checklist

API Number: 47- 043 - Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 9
Farm Name: O'Hill
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2402
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 417,230 Northing: 4,232,404
Elevation: 275
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☐

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

UR 38

Reviewer Name: Signature:
Date Reviewed:

** Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

RECORD of Well No. 9 on Oliver Heil Farm Acres

Field, District County

Rig Commenced 19 , Completed 19

Drilling Commenced June 17 1912, Completed Aug 3 1912

Cost per foot, 1¼ Contractor, Yantley & Freeman Gas Co. Address, Yantley, W.Va.

Drillers' Names A. W. Boyd & T. L. McElhinney

CONDUCTOR AND CASING USED IN DRILLING

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7¼ Inch	6¼ Inch	6¼ Inch	5¼ Inch	5 3-16-Inch	4¼ Inch
16						1700				

CONDUCTOR AND CASING LEFT IN WELL

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7¼ Inch	6¼ Inch	6¼ Inch	5¼ Inch	5 3-16 Inch	4¼ Inch
16						1700				

OIL WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods		Size of Packer	Depth Set
8/8/12	80 qts	2 mc	Shot 10	6/16	130 qts.		

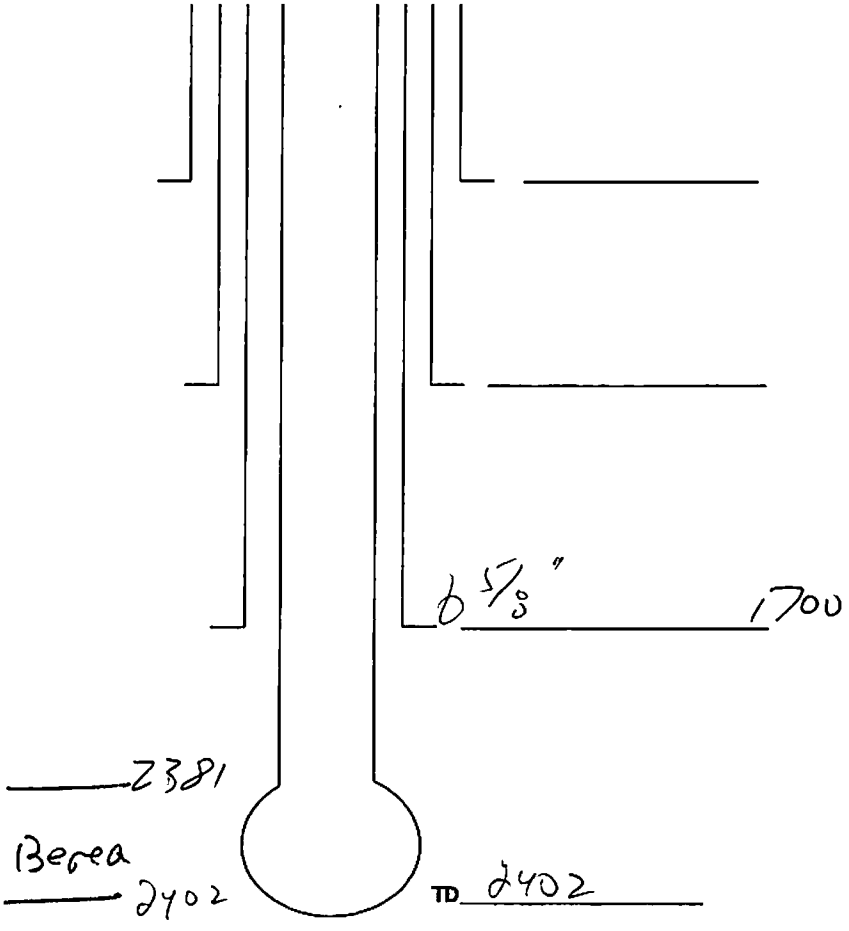
GAS WELL

Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
				El= 51
Conductor		16	16	
Red Rock	16	90	74	
Sand	90	115	25	
Slate	115	170	55	
Sand	170	315	145	
Coal	315	320	5	
Sand	320	475	155	
Coal	475	480	5	
Slate	480	500	20	
Sand	500	610	110	
Slate	610	690	80	480' of 10" hole
Sand	690	760	70	
Slate	760	800	40	Gas at 1040'
Sand	800	860	60	
Slate	860	985	125	
Lime	985	1000	15	Hole full of Water at 1085'
Slate	1000	1010	10	
Salt sand	1010	1650	640	
Little Lime	1650	1680	30	
Pencil cave	1680	1690	10	
Big Lime	1690	1870	180	
Big Injune	1870	1950	80	
Slate	1950	2010	60	
Stray	2010	2090	80	
Slate	2090	2357	267	
Brown Shale	2357	2381	24	
Berea Sand	2381	2402	21	

Griffithsville Unit #2 Field

47-043-



From Drillers Records/Plugging Records

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WVDEP OOG Internal Use Only
Rev. 6/14/16

AOR - Well Review Checklist

API Number: 47- 043 - 38392 Area Permit Number: 2R AP

Operator Name: H 6 Energy

Operator's Well #: 10

Farm Name: Oliver Hill

Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐

Well Status: Active ☐ Abandoned ☐ Plugged ☒

TD of well: 7379

Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐

Easting: 417,529 Northing: 4,232,475

Elevation: 272

Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐	
Date of Last MIT:	Passed?	No ☐	Yes ☐	
Open Hole Completion		No ☐	Yes ☒	
Well penetrates injection zone?		No ☐	Yes ☒	
Well perforated in injection zone?		No ☒	Yes ☐	
Cemented across injection zone?		No ☒	Yes ☐	
Packer immediately above injection zone (<100')?		No ☐	Yes ☐	No Packer ☐
		If No: Provide Depth:		
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒	

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**

Bottom Hole Injection Pressure **0**

Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:

Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-30392

RECORD of Well No. 10 on Clem Neel Farm Acres
Field, District County
Rig Commenced 6-9-1912 Completed Dec. 17 1912.
Drilling Commenced 6-9-1912 Completed Dec. 17 1912.
Cost per foot, 1¼ Contractor Jarvis & Thompson Dec Address, Jarvis, W. Va.
Drillers' Names L. P. Vanbrunt & Jay Kennedy

CONDUCTOR AND CASING USED IN DRILLING

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7¼ Inch	6¼ Inch	6¼ Inch	5¼ Inch	5 3-16-Inch	4¼ Inch
14						1695'				

CONDUCTOR AND CASING LEFT IN WELL

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7¼ Inch	6¼ Inch	6¼ Inch	5¼ Inch	5 3-16 Inch	4¼ Inch
14						1695' Pulled When Abandoned				

OIL WELL — GAS WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods	Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure
12/2/12	80 qts. 2nd Shot		3/22	17-120 qts.					

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Conductor		14	14	El. 30
Fine Sand	14	60	46	
Slate	60	115	55	
Sand	115	190	75	
Slate	190	250	60	
Sand	250	280	30	
Slate	280	314	34	
Sand	314	320	6	320' 10" Tube
Coal	320	477	157	
Sand	477	480	3	
Coal	480	500	20	
Slate	500	605	105	
Sand	605	680	75	
Slate	680	750	70	Hole full. Water at 710
Sand	750	795	45	
Slate	795	840	45	
Sand	840	965	125	
Slate	965	990	25	
Slate & Sand	990	1595	605	
Big Injun Sand	1595	1630	35	
Slate	1630	1640	10	
Little Lime	1640	1671	31	
Pencil Cave	1671	1677	6	
Big Lime	1677	1867	190	
Big Injun	1867	1932	65	
Slate	1932	2012	80	
Sand	2012	2097	85	
Slate	2097	2338	241	
Shale	2338	2360	22	
Gritty Shale	2360	2379	19	Abandoned Jan. 13, 1943
Berea Sand				

47.043 - 30392

FORM CO-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

Samuel Thomas — COAL OPERATOR OR OWNER (If any)
Yawkey, W. Va. — ADDRESS

COAL OPERATOR OR OWNER
ADDRESS

Samuel Thomas — LEASE OR PROPERTY OWNER
Yawkey, W. Va. — ADDRESS

SOUTH PENN NATURAL GAS COMPANY — NAME OF WELL OPERATOR
Union Trust Building, Parkersburg, W.Va. — COMPLETE ADDRESS

December 13, 1943 — WELL AND LOCATION

Duval — District
Lincoln — County
Well No. 10
Oliver Hill — Farm

STATE INSPECTOR SUPERVISING PLUGGING Calvin Hall

AFFIDAVIT

STATE OF WEST VIRGINIA, County of LINCOLN } ss:

J. A. Johnson and J. H. Matthews 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 South Penn Natural Gas Co., well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 27th day of September, 1943, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD — FORMATION	FILLING MATERIAL — CONTENT	FROM	TO	PLUGS USED — SIZE & KIND	CASING — CSG PULLED	CSG LEFT IN
	Clay	2379	2340			
Berea Sand	Cement	2340	2320	7" Casing	1695	None
	Set bridge		1962			
Big Injun Sand	Clay	1962	1705			
	Cement	1705	1695			
	Clay	1695	1620			
Big Lime & Little Lime	Cement	1620	1610			
	Clay	1610	970			
Salt Sand	Cement	970	960			
	Set Bridge		350			
	clay	294	To Surface			
COAL SEAMS				DESCRIPTION OF MONUMENT		
(NAME)	Cement	350	294	6-5/8" Casing extending 31' above surface, set in concrete and with the Inscription		
(NAME)				S.P.N.G.Co. — Oliver Hill #10		
(NAME)				10-29-43		

and that the work of plugging and filling said well was completed on the 29th day of October, 1943.

And further deponents saith not.

J. A. Johnson
J. H. Matthews

Sworn to and subscribed before me this 9th day of December, 1943.

J. H. Smith
Notary Public.

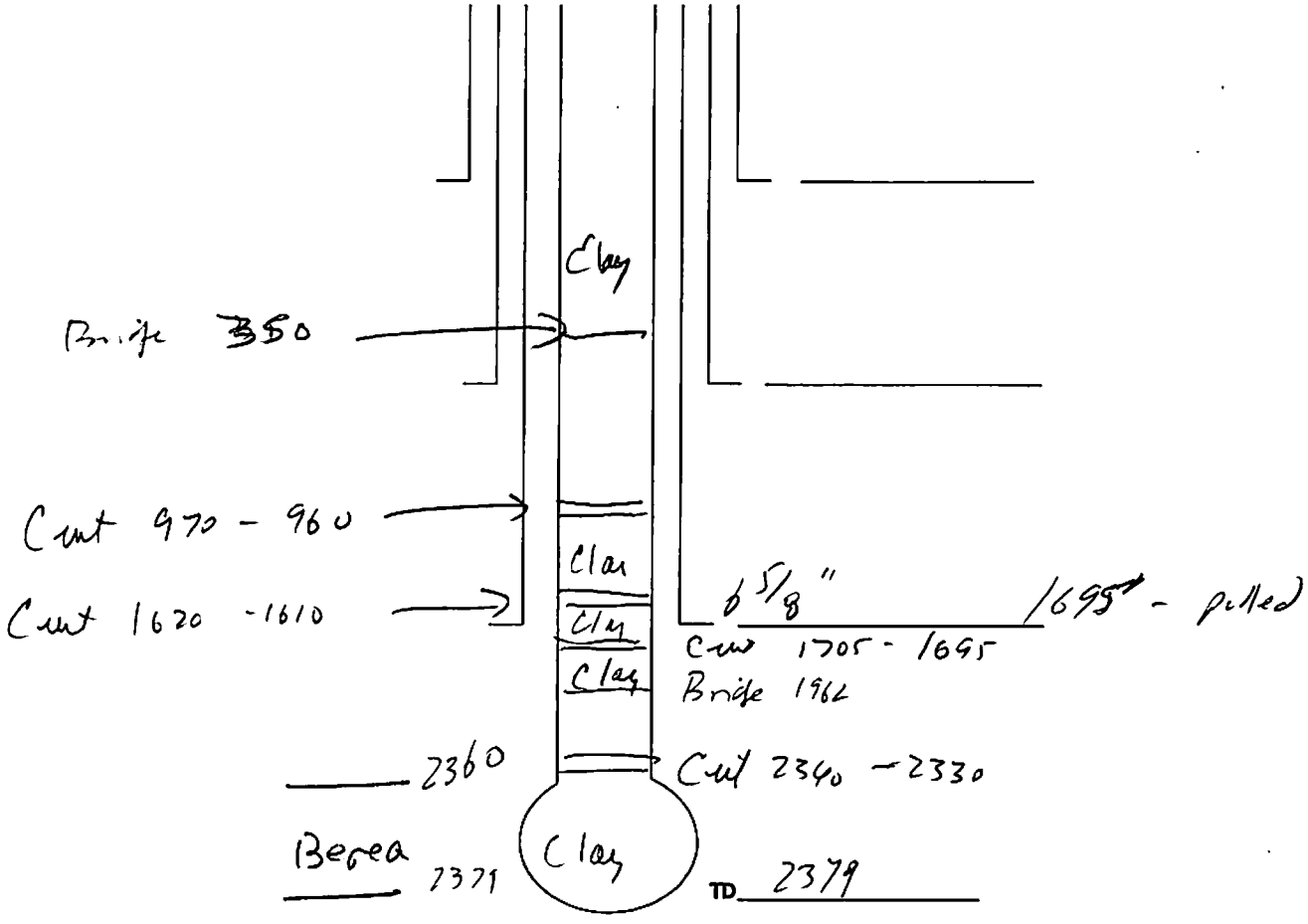
My commission expires December 8, 1947

Permit No. LIN-392

Oliver Hill 10

Griffithsville Unit #2 Field

47-043-



From Drillers Records/Plugging Records

(167)

WVDEP OOG Internal Use Only
Rev. 6/14/16

AOR - Well Review Checklist

API Number: 47- 043 - 31040 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 11
Farm Name: Olivia Hill
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2393
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 1416, 976 Northing: 4,223, 026
Elevation: 274'
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-31040

RECORD of Well No. 11 on Olive Shell Farm Acres

Field, District County

Rig Commenced 10 , Completed 10

Drilling Commenced Oct 17 1913, Completed May 26 1913

Cost per foot, 1 1/2 Contractor Gauley Drilling Co Address Gauley W Va

Drillers' Names C L Stone & E L Stillwagon

CONDUCTOR AND CASING USED IN DRILLING

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7¼ Inch	6¼ Inch	6¼ Inch	5¼ Inch	5 3-16-Inch	4¼ Inch
16						1690				

CONDUCTOR AND CASING LEFT IN WELL

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7¼ Inch	6¼ Inch	6¼ Inch	5¼ Inch	5 3-16 Inch	4¼ Inch
16						1690				

OIL WELL — GAS WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods		Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure
5/27/13	80 qts									

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Conductor		16	16	
Sand	16	100	84	
Sand	100	150	50	
Slate	150	200	50	
Sand	200	350	150	
Slate	350	400	50	
Sand	400	510	110	
Slate	510	635	125	350' 10" hole
Sand	635	700	65	
Slate + shells	700	800	100	
Lime	800	900	100	
Lime	900	960	60	
Slate	960	1000	40	Hole full of water 1080'
Salt sand	1000	1640	640	
Little Lime	1640	1675	35	
Pencil Cave	1675	1680	5	
Big Lime	1680	1860	180	
Big Injun	1860	1920	60	
Slate	1920	1990	70	
Lime shells	1990	2085	95	
Slate	2085	2355	270	
Brown Shale	2355	2375	20	
Berea sand	2375	2392	18	

47.043 - 31040

FORM GG-6

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

LEASE OR PROPERTY OWNER

ADDRESS

NAME OF WELL OPERATOR: G. S. H. Supply Co.

COMPLETE ADDRESS: Griffithsville, W. Va.

Feb. 26, 19 52

WELL AND LOCATION: Duval District

Lincoln County

Well. No. 11

Oliv Hill Farm

STATE INSPECTOR SUPERVISING PLUGGING: Dana E. Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA, County of Lincoln } ss:

and _____ 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 G. S. H. Supply Co., well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 7 day of Jan, 19 52, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD: FORMATION	FILLING MATERIAL	PLUGS USED: SIZE & KIND	CASING: CSG PULLED	CSG LEFT IN
	Set bridge 2355'			
	2 bags neat cement 2355' to 2345'	7"	1650'	none
	crushed stone 5'	5"	1745'	none
	Filled with clay 2345' to 2250'			
	neat cem. 2250' to 2150'			
	set bridge at 1920'			
	neat cement 1920' to 1910'			
	crushed stone 5'			
	Filled w/ clay 1905' to 1720'			
	neat cement 1720' to 1715'			
	crushed stone 5'			
	set bridge at 1200'			
	neat cement 1200' to 1190'			
	crushed stone 5'			
	filled w/ clay 1185' to 980'			
	neat cement 980' to 970'			
	set perm. bridge 350'			
	2 bags neat cement 350' to 340'			
	crushed stone 5'			
	Filled with clay to surface			

COAL SEAMS	DESCRIPTION OF MONUMENT
(NAME)	Erected marker according to
(NAME)	Rule 18, 1931 Regulation.
(NAME)	
(NAME)	

RECEIVED FEB 29 1952 MAY 1952 WEST VIRGINIA DEPARTMENT OF MINES

and that the work of plugging and filling said well was completed on the 16 day of May, 19 52

And further deponents saith not.

L. S. Stephan Jr.

Ed. Record

Sworn to and subscribed before me this 14 day of May, 19 52

J. R. Osborne
Notary Public.

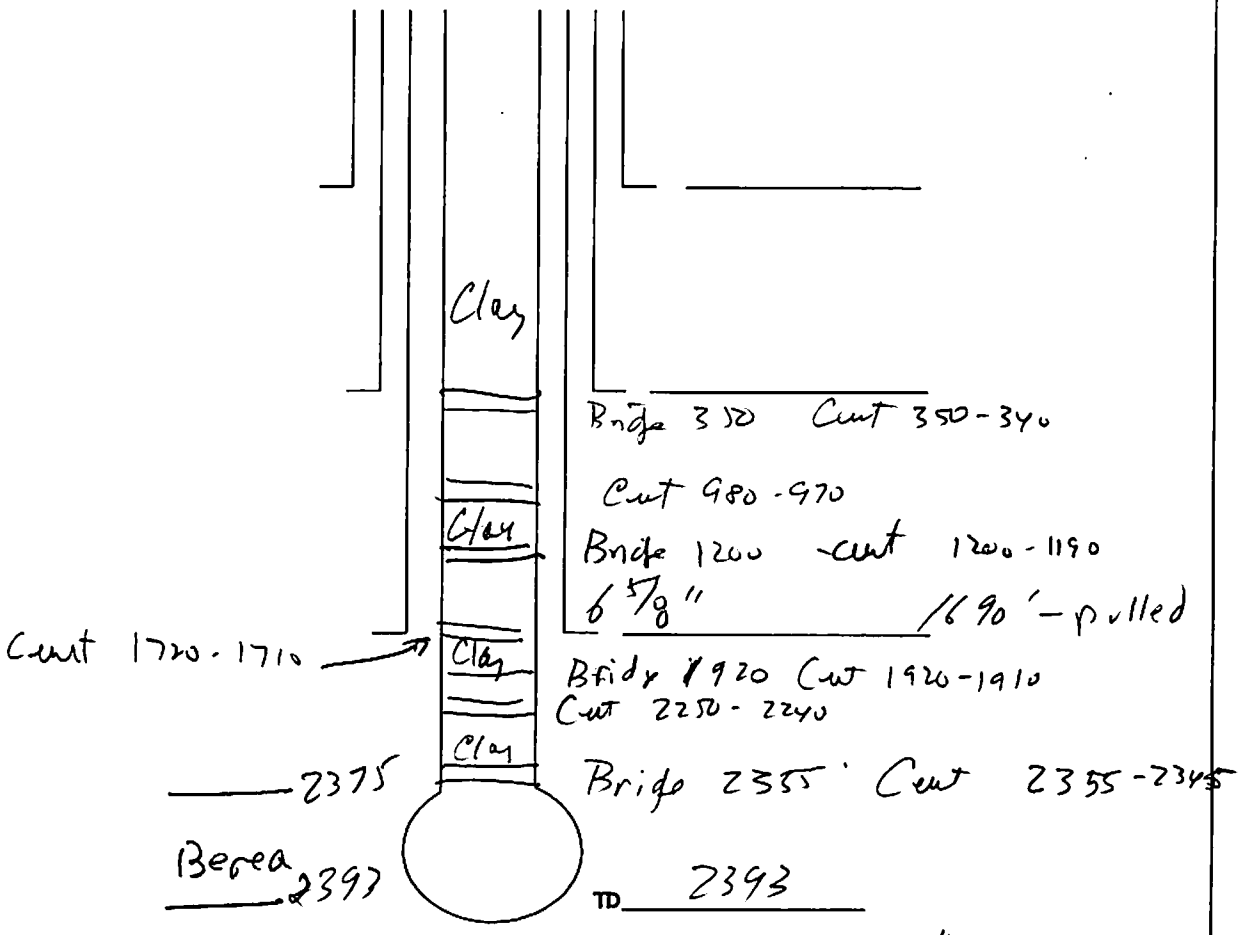
My commission expires: Oct-9-1957

Permit No. Lin-2040

O Hill 11

Griffithsville Unit #2 Field

47-043- 31040



From Drillers Records/Plugging Records

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WVDEP OOG Internal Use Only
Rev. 6/14/16

AOR - Well Review Checklist

API Number: 47- 043 - 30960 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 12
Farm Name: Oliver Hill
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2382
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 417,112 Northing: 4,232,699
Elevation: 271
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043 - 30960
30960

RECORD of Well No. 12 on Oliver Hull Farm Acres
Field, District County
Rig Commenced 19, Completed 19
Drilling Commenced Feby 20 1914, Completed July 18 1914
Cost per foot, 11½ Contractor, Yanskey & French Co. Drl. No. Address, Yanskey W.Va.
Drillers' Names Frank Bais Jr & J.L. McElhattan

CONDUCTOR AND CASING USED IN DRILLING

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅝ Inch	6¾ Inch	6¼ Inch	5¾ Inch	5 3-16-Inch	4½ Inch
16						1705				

CONDUCTOR AND CASING LEFT IN WELL

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅝ Inch	6¾ Inch	6¼ Inch	5¾ Inch	5 3-16 Inch	4½ Inch
16						1705				

OIL WELL / GAS WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods		Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure
7/20/14	8 qts									

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Conductor		16	16	
Sand	16	30	14	
Red Rock	30	40	10	
Slate	40	60	20	
Sand	60	120	60	
Slate	120	180	60	
Sand	180	320	140	
Coal	320	325	5	
Slate	325	340	15	385" 10" hole
Sand	340	380	40	
Coal	380	385	5	Gas in salt sand at 1025
Slate	385	400	15	
Sand	400	620	220	
Slate	620	700	80	
Sand	700	720	20	
Slate	720	760	40	Hole full of water at 1060
Sand	760	840	80	
Slate	840	1000	160	
Salt Sand	1000	1655	655	
Slate	1655	1660	5	
Little Lime	1660	1690	30	Gas in Injun 1900'
Pencil Cave	1690	1695	5	
Big Lime	1695	1875	180	
" Injun	1875	1965	90	
Slate	1965	2045	80	
Lime Shells	2045	2125	80	
Slate	2125	2285	160	
Lime Shells	2285	2341	56	
Brown shale	2341	2361	20	
Berea Sand	2361	2382	21	

47.043 - 30960

FORM 66-6

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER
ADDRESS
COAL OPERATOR OR OWNER
ADDRESS
LEASE OR PROPERTY OWNER
ADDRESS

Bradford Supply Company
NAME OF WELL OPERATOR
Bradford, Pennsylvania
COMPLETE ADDRESS
November 2, 19 51
WELL AND LOCATION
Duval, District
Lincoln County
Well. No. 12
Oliver Hill Farm

STATE INSPECTOR SUPERVISING PLUGGING Mana Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

Dennis A Bayles and Luther W. Monticastle 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 Bradford Supply Company, well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 19 day of August, 19 51, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD	FILLING MATERIAL			PLUGS USED	CASING	
FORMATION	CONTENT	FROM	TO	SIZE & KIND	CSG PULLED	CSG LEFT IN
	Bridge Set At	2340'		6 5/8"	1705'	None
	Clay	2200'		2"	2357'	None
	Cement	2200'	2190'			
	Crushed Stone	5'				
	Bridge Set At	2000'				
	Clay	1830'				
	Cement	1830'	1820'			
	Crushed Stone	5'				
	Bridge set at	1400'				
	Clay	980'				
	Cement	980'	970'			
	Crushed Stone	5'				
	Bridge Set At	300'				
	Cement	300'	290'			
	Clay to surface					

COAL SEAMS	DESCRIPTION OF MONUMENT
(NAME)	Erected Marker According Rule 18, 1931 Regulations
(NAME)	
(NAME)	
(NAME)	

and that the work of plugging and filling said well was completed on the 24 day of August, 19 51.

And further deponents saith not.

Dennis A Bayles
Luther W. Monticastle

Sworn to and subscribed before me this 27 day of Nov, 19 51.

J. L. McClure
Notary Public.

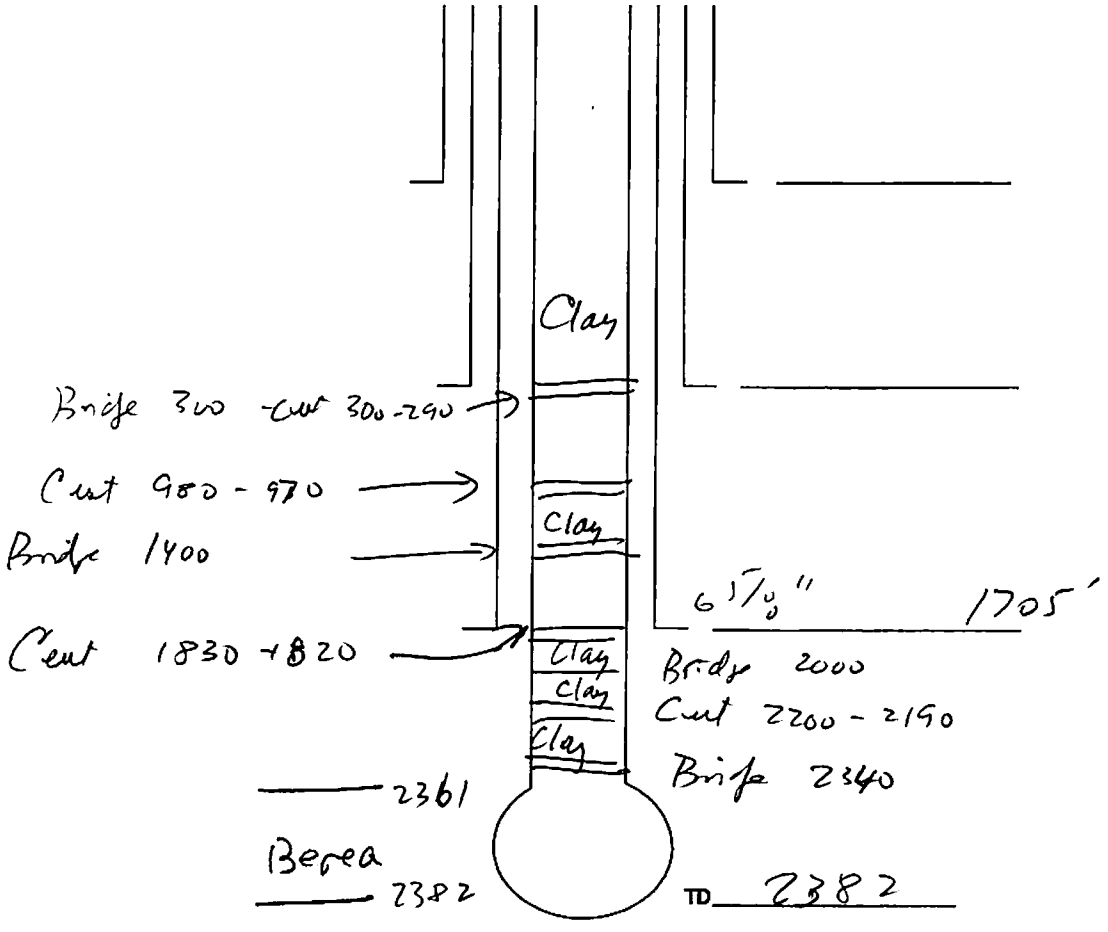
My commission expires:
Nov 6 1953

Permit No. LIN-960

O Hill 12

Griffithsville Unit #2 Field

47-043- 30960



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

(164)

AOR - Well Review Checklist

API Number: 47- 043 - 31041 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 13
Farm Name: O Hill
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2375
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 417,028 Northing: 4,232,882
Elevation: 360
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-31041

RECORD of Well No. 13 on Oliver Hall Farm Acres Griffiths
Hall Field, Dunn District Lincoln County
Rig Commenced ..... 19..., Completed 19
Drilling Commenced Dec 28 1915 Completed Feb 12 1916
Cost per foot, 11½ Contractor, Bone Drilling Co Address, Hamlin W. Va.
Drillers' Names W. D. Rodgers & E. L. Stiles

CONDUCTOR AND CASING USED IN DRILLING

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7¼ Inch	6¼ Inch	6¼ Inch	5¼ Inch	5 3-16-Inch	4¼ Inch
16						1670				

CONDUCTOR AND CASING LEFT IN WELL

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7¼ Inch	6¼ Inch	6¼ Inch	5¼ Inch	5 3-16 Inch	4¼ Inch
16						1670				

OIL WELL — GAS WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rock	Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure
2/14/16	80 qts.								

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Soil		16	16	Elev 8:
Sand	16	200	184	
Slate	200	250	50	
Sand	250	370	120	Gas 370'
Coal	370	375	5	
Slate	375	425	50	
Sand	425	600	175	Reduced hole from 10" to 8"
Slate	600	700	100	at 375'
Sand	700	800	100	
Slate	800	900	100	
Sand	900	930	30	Hole full and Measured
Slate	930	970	40	1226'
Salt Sand	970	1625	655	
Black Lime	1625	1660	35	
Pencil Cave	1660	1665	5	
White Lime	1665	1845	180	
Injun	1845	1915	70	
Slate	1915	1975	60	
Shells	1975	2075	100	
Lee & Shells	2075	2334	259	
Brown Shale	2334	2354	20	
Brn. Sand	2354	2375	21	

Shot 4-18-30-40qts. at 2364-2372' Gas flow

47.043 - 31041

FORM OG-G

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

LEASE OR PROPERTY OWNER

ADDRESS

G. S. H. Supply Co.
NAME OF WELL OPERATOR

Griffithsville, W. Va.
COMPLETE ADDRESS

Feb. 26, 1952
WELL AND LOCATION

Duval District

Lincoln County

Well No. I3

G. Hill Farm

STATE INSPECTOR SUPERVISING PLUGGING Dana Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

and

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 G. S. H. Supply Co., well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 2 day of Jan., 19 52, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD	FILLING MATERIAL	PLUGS USED	CASING	
FORMATION		SIZE & KIND	CSG PULLED	CSG LEFT IN
	Set Per. bridge at 2334'			
	neat cement 2334 to 2324	7"	I670'	none
	crushed stone 5'	5"	I719'	none
	Fill W/clay to ~~surface~~ 2230'			
	neat cement 2230 to 2220'			
	Set bridge at1915'			
	~~Neat Cement I915 to I905'~~			
	~~Crushed stone 5'~~			
	Fill W/Clay I900' to I700'			
	neat cement I700' to I690'			
	set a bridge at II70'			
	Neat Cement II70' to II60'			
	Crushed stone 5'			
	~~Fill W/Clay II55' to 950'~~			
	~~Neat Cement 950' to 940'~~			
	~~Set A per. Bridge at 350'~~			
	2 sacks neat cement 350 to 340'			
COAL SEAMS	crushed stone 5'			
(NAME)	Fill W/clay to surface	DESCRIPTION OF MONUMENT		
(NAME)		erected marker as decribed in rule 18, 1951 reg.		
(NAME)				
(NAME)				

RECEIVED MAY 1952 WEST VIRGINIA DEPARTMENT OF MINES

and that the work of plugging and filling said well was completed on the 7 day of January, 1952.

And further deponents saith not.

L. S. Stephens Jr
Ed Record

Sworn to and subscribed before me this 14 day of May, 1952

J Rankin
Notary Public.

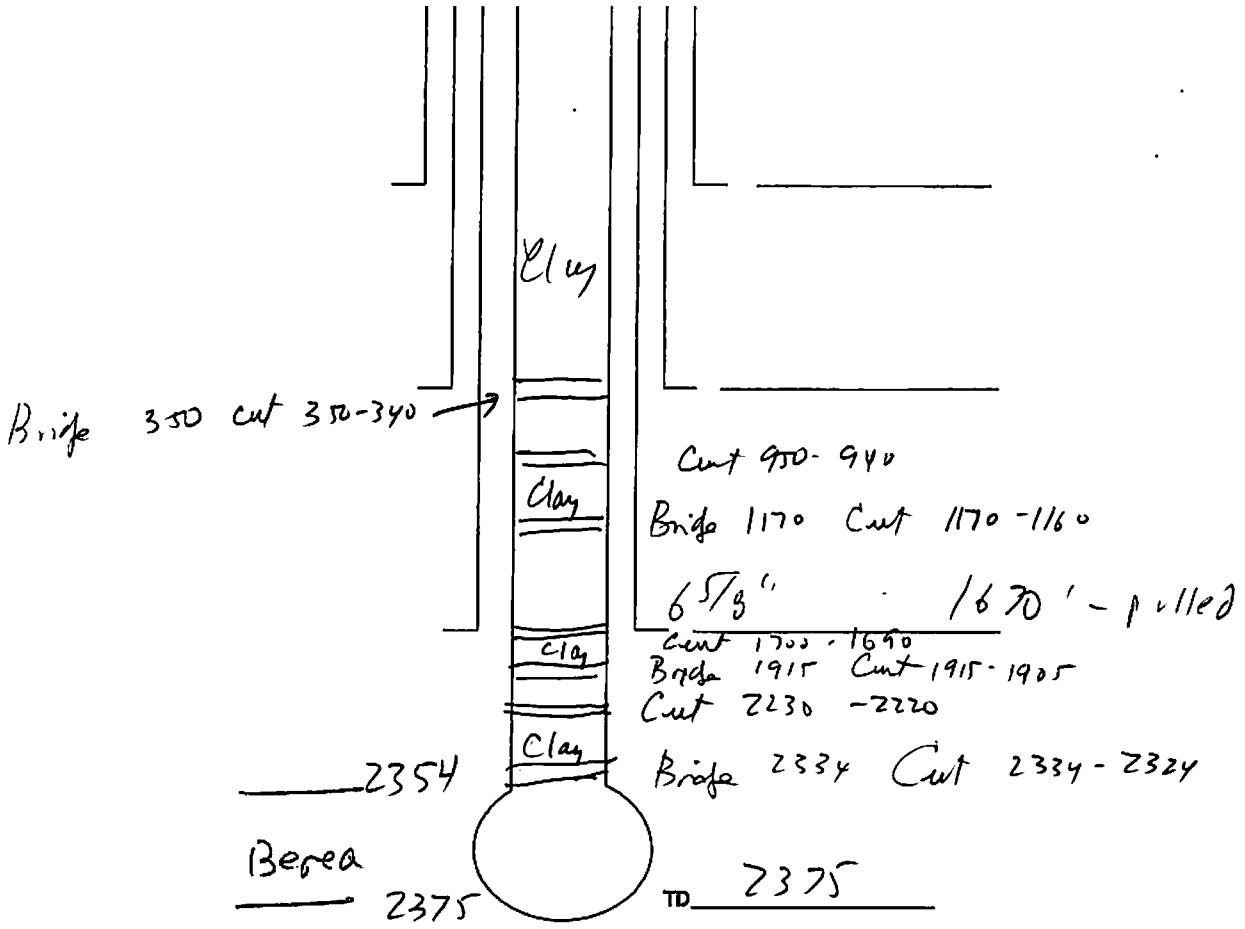
My commission expires:
Oct-9-1957

Permit No. An-1011

Oliver Hill 13

Griffithsville Unit #2 Field

47-043- 31041



Pulled 1719' 5" casing

From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

170

AOR - Well Review Checklist

API Number: 47- 043 - 30588 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 14
Farm Name: Oliver #11
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2282
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 1417,201 Northing: 4,232,558
Elevation: 230
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-30528

RECORD of Well No. 14 on Oliver Hill Farm Acres Gekill
Field, Dunal District Lincoln County
Rig Commenced ..... 19..., Completed ..... 19...
Drilling Commenced Apr 10 1916, Completed May 15 1916
Cost per foot, 1.15 Contractor, Bonne Drilling Co Address, Glenville W.Va.
Drillers' Names C.L. Stillwagon, A.A. Delaney

CONDUCTOR AND CASING USED IN DRILLING

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅛ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 3-16-Inch	4⅛ Inch
16				215		1575				

CONDUCTOR AND CASING LEFT IN WELL

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅛ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 3-16 Inch	4⅛ Inch
16				—		1575				

OIL WELL / GAS WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods		Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure
5/17/16	80qts									

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
				El. 739.
Soil		30	30	
Sand	30	125	95	
Slate	125	210	85	
Coal	210	215	5	
Sand	215	400	185	
Slate	400	500	100	Gas 900'
Sand	500	530	30	
Sand	530	750	200	Hole full Salt Water at
Slate	750	880	130	935
Salt Sand	880	1530	650	
Black Lime	1530	1565	35	
Pencil Cave	1565	1570	5	
White Lime	1570	1750	180	
Injun Sand	1750	1820	70	
Slate	1820	1900	80	
Shells	1900	1980	80	
Slate	1980	2242	262	
Brown Shale	2242	2262	20	
Berea Grit	2262	2282	20	

47.043 - 30568

FORM GG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

South Penn Natural Gas Co.
LEASE OR PROPERTY OWNER

Parkersburg, W. Va.
ADDRESS

C. R. DeLay
NAME OF WELL OPERATOR

P. O. Box 49 Hamlin, W. Va.
COMPLETE ADDRESS

February 3, 1949
WELL AND LOCATION

Duval District

Lincoln County

Well No. 14

O. Hill Farm

STATE INSPECTOR SUPERVISING PLUGGING D. E. Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

C. R. DeLay and Guadalupe Jaans 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 C. R. DeLay well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 15 day of January, 1949, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD FORMATION	FILLING MATERIAL CONTENT	FROM	TO	PLUGS USED SIZE & KIND	CASING CSG PULLED	CSG LEFT IN
	Clay	2282	2200			
	Cement	2200	2190			
	Stone	2190	2185			
	Clay	2185	1915			
5-3/16" Pulled casing loose and out as hole was filled					5-3/16"	340'
	Clay	1915	1605			
	Cement	1605	1595			
	Stone Lime	1595	1590			
Pulled 6-5/8" casing loose and out as hole was filled					6-5/8	1575'
Permanent Bridge		1055	1050			
	Cement	1050	1040			
	Stone	1040	1035			
	Clay	1035	860			
	Cement	860	855			
Permanent Bridge		365	350			
	Cement	350	340			
	Stone	340	335			
	Filled with clay to surface					

COAL SEAMS
(NAME)
(NAME)
(NAME)
(NAME)

DESCRIPTION OF MONUMENT
18" X 18" x 20" Concrete Block
January 22, 1949

and that the work of plugging and filling said well was completed on the 22 day of January, 1949.

And further deponents saith not.

Guadalupe Jaans
C. R. DeLay

Sworn to and subscribed before me this 3 day of Feb, 1949

James C. Carter
Notary Public

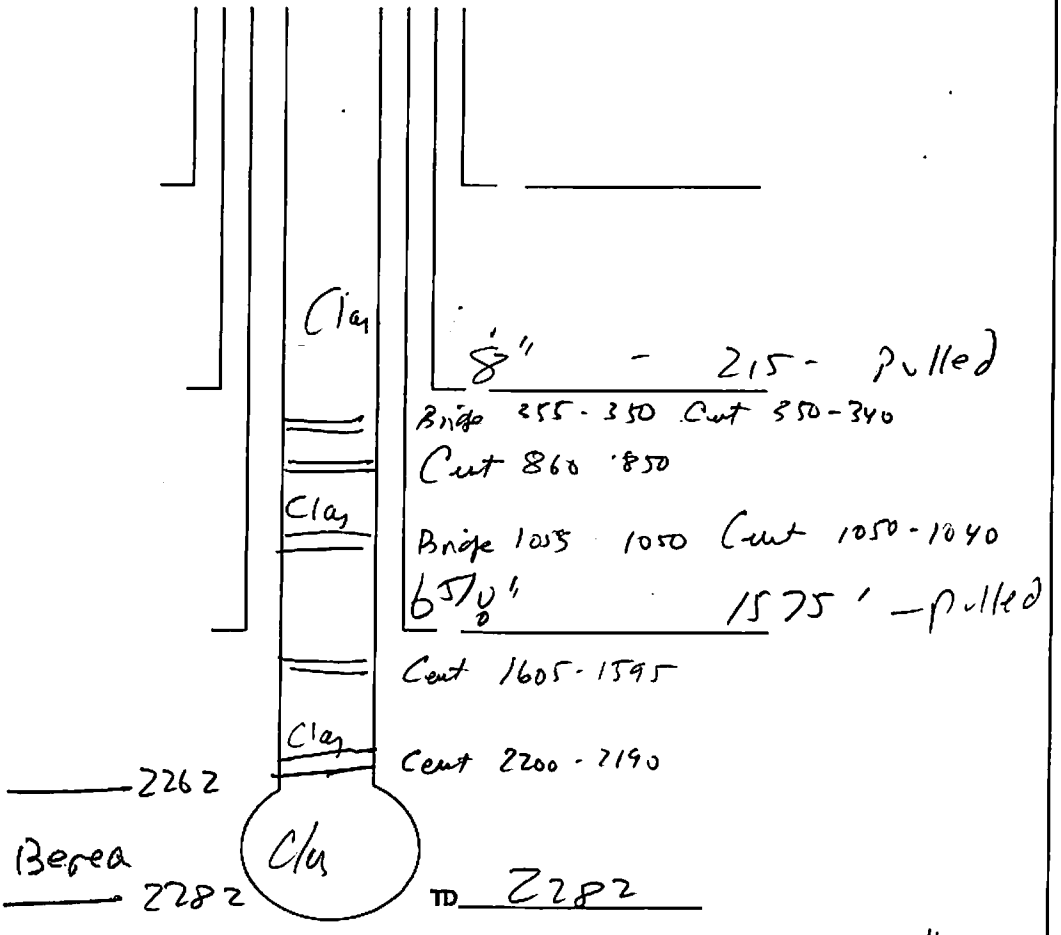
My commission expires: July 7 1958

Permit No. Lin-515

O Hill 14

Griffithsville Unit #2 Field

47-043- 30582



5 3/16" CSHG

Pulled 340'

From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

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AOR - Well Review Checklist

API Number: 47- 043 - 30569 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 15
Farm Name: Oliver Hill
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2342
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 416,924 Northing: 4,232,727
Elevation: 256
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-30564

RECORD of Well No. 15 on Oliver Hill Farm Acres

Field, District County

Rig Commenced 19, Completed 19

Drilling Commenced May 24 1916 Completed June 28 1916

Cost per foot, 11½ Contractor Bone Drilling Co. Address Hawley, W. Va.

Drillers' Names A. A. Delong & A. M. Shanklin

CONDUCTOR AND CASING USED IN DRILLING

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅝ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 3-16-Inch	4½ Inch
11						1645'				

CONDUCTOR AND CASING LEFT IN WELL

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅝ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 3-16 Inch	4½ Inch
11						1645'				

OIL WELL — GAS WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods		Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure
6/30/16	80 qrt.									

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Soil		11	11	
Sand	11	61	50	Reduced hole from 10" to 8"
Slate	61	121	60	at 350'
Sand	121	221	100	
Slate	221	245	24	
Coal	245	250	5	
Sand	250	475	225	
Slate	475	550	75	Hole full salt water at 1025'
Sand	550	650	100	
Slate	650	750	100	
Sand	750	830	80	
Slate	830	900	70	
Sand	900	930	30	
Slate	930	970	40	
Salt Sand	970	1600	630	
Black Lime	1600	1635	35	
Pencil Cave	1635	1640	5	
Wht. Lime	1640	1820	180	
Big Injun	1820	1880	60	
Slate	1880	1970	90	
Shells	1970	2070	100	
Slate	2070	2301	231	
Brown Shale	2301	2321	20	
Berea Grit	2321	2342	21	

FORM OG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

47-043-30569

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

South Penn Natural Gas Co.
LEASE OR PROPERTY OWNER

Parkersburg, W. Va.
ADDRESS

C. R. DeLay
NAME OF WELL OPERATOR

P. O. Box 49 Hamlin, W. Va.
COMPLETE ADDRESS

February 19, 1949
WELL AND LOCATION

Duval District

Lincoln County

Well No. 15

O. Hill Farm

STATE INSPECTOR SUPERVISING PLUGGING D. E. Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

C. R. DeLay and Guadalupe Saenz

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 C. R. DeLay, well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 25 day of January, 1949, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD FORMATION	FILLING MATERIAL CONTENT	FROM	TO	PLUGS USED SIZE & KIND	CASING CSG PULLED	CSG LEFT IN
Permanent	Bridge	2305	2300			
	Cement	2300	2290			
	Stone	2290	2285			
	Clay	2285	2200			
	Cement	2200	2190			
Permanent	Bridge	1885	1880			
	Cement	1880	1870			
	Stone	1870	1865			
	Clay	1865	1675			
	Cement	1675	1665			
	Stone	1665	1660			
Pulled 6-5/8" casing loose and out as hole was filled					1645'	6-5/8"
	Clay	1660	1600			
	Cement	1600	1590			
Permanent	Bridge	1255	1250			
COAL SEAMS	Cement	1250	1240	DESCRIPTION OF MONUMENT		
(NAME)	Stone	1240	1235	18"X18"X 30" Concrete Block		
(NAME)	Red Clay	1235	950	January 29, 1949		
(NAME)	Cement	950	940			
(NAME)	Con't on reverse side					

and that the work of plugging and filling said well was completed on the 29 day of January, 1949.

And further deponents saith not.

Guadalupe Saenz
C. R. DeLay

Sworn to and subscribed before me this 23 day of Feb, 1949

James C. Cartwright
Notary Public.

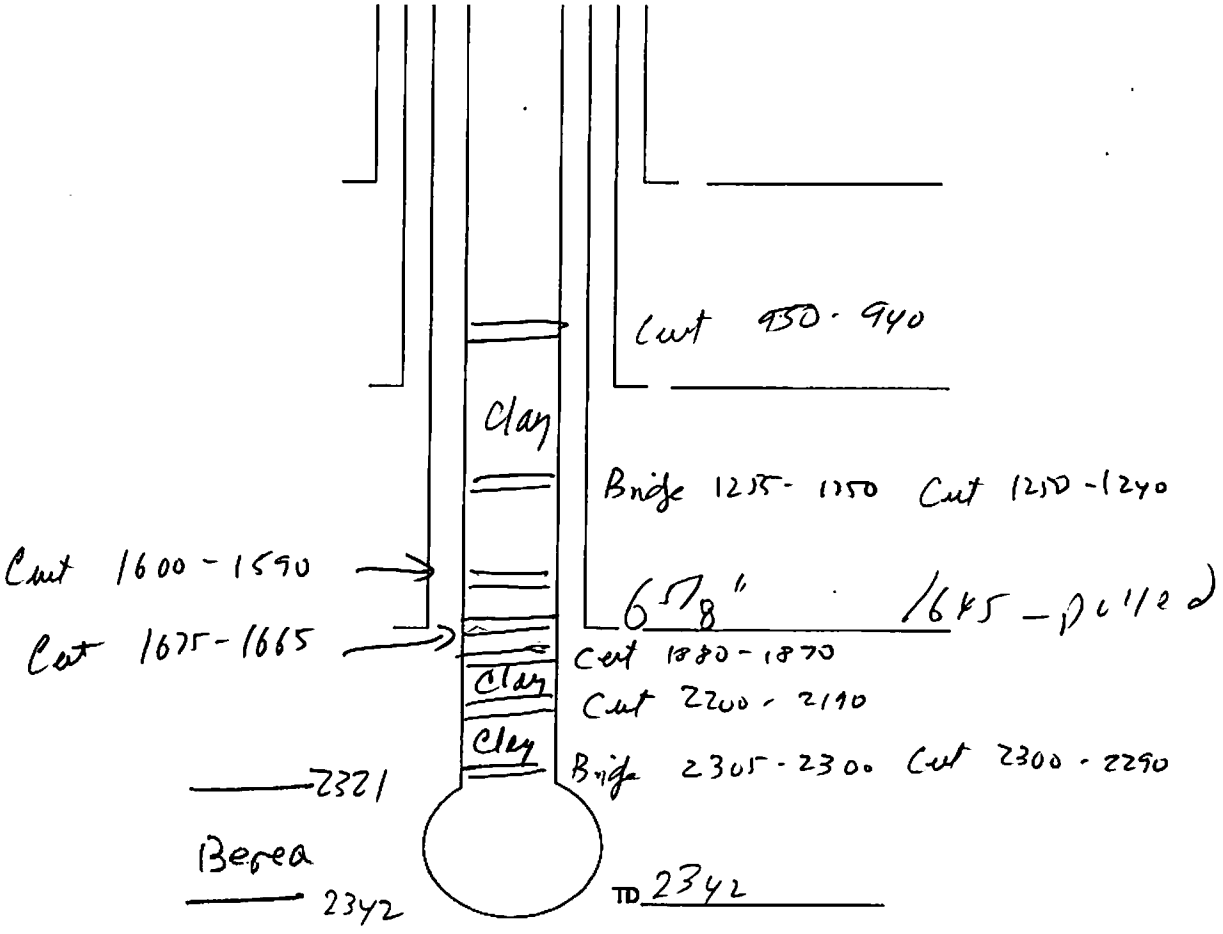
My commission expires: July 9 1952

Permit No. [illegible]-569

O Hill 15

Griffithsville Unit #2 Field

47-043- 30589



From Drillers Records/Plugging Records

(172)

WVDEP OOG Internal Use Only
Rev. 6/14/16

AOR - Well Review Checklist

API Number: 47- 043 - 30574 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 16
Farm Name: Oliver Hill
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2304
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 416,995 Northing: 4,232,580
Elevation: 245'
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = 0
Bottom Hole Injection Pressure 0
Hydrostatic Pressure 0

Comments:

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

08-10

47-043-30574

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

WELL RECORD

Permit No. _____ Oil or Gas Well _____ (KIND)

Company South Penn Natural Gas Co.
Address Parkersburg, W. Va.
Farm O. Hill Acres 112½
Location (waters) _____
Well No. 16 Elev. _____
District Duval County Lincoln
The surface of tract is owned in fee by _____
_____ Address _____
Mineral rights are owned by _____
_____ Address _____
Drilling commenced Sept. 27, 1916
Drilling completed Nov. 2, 1916
Date Shot _____ From _____ To _____
With _____
Open Flow _____ /10ths Water in _____ Inch
_____ /10ths Merc. in _____ Inch
Volume _____ Cu. Ft.
Rock Pressure _____ lbs. _____ hrs.
Oil _____ bbls., 1st 24 hrs.
Fresh water _____ feet _____ feet
Salt water _____ feet _____ feet

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			
16			Kind of Packer
13			
10			Size of
8¼			
6¼ Cas.		1609	Depth set
5 3/16			
3			Perf. top
2 Tubing		2296	Perf. bottom
Liners Used			Perf. top
			Perf. bottom

CASING CEMENTED _____ SIZE _____ No. Ft. _____ Date

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

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks
Cond.			--	11'			
Salt Sand			925	1560			
Little Lime			1560	1595			
Pencil Cave			1595	1600			
Big Lime			1600	1785			
Big Injun			1785	1840			
Brown Shale			2262	2282			
Berea			2282	2304			

JAN 19

(Over)

47-043-30569

FORM 66-6

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

South Penn Natural Gas Co.
LEASE OR PROPERTY OWNER

Clarksburg, W. Va.
ADDRESS

O. R. DeLay
NAME OF WELL OPERATOR

P. O. Box 49 Hamlin, W. Va.
COMPLETE ADDRESS

February 19, 1949
WELL AND LOCATION

Duval District

Lincoln County

Well No. 16

O. Hill Farm

STATE INSPECTOR SUPERVISING PLUGGING D. E. Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

O. R. DeLay and Guadalupe Saenz

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 O. R. DeLay, well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 25 day of January, 1949, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD	FILLING MATERIAL			PLUGS USED	CASING	
FORMATION	CONTENT	FROM	TO	SIZE & KIND	CSG PULLED	CSG LEFT IN
Permanent	Bridge	2305	2300			
	Cement	2300	2290			
	Stone	2290	2285			
	Clay	2285	2200			
	Cement	2200	2190			
Permanent	Bridge	1885	1880			
	Cement	1880	1870			
	Stone	1870	1865			
	Clay	1865	1675			
	Cement	1675	1665			
	Stone	1665	1660			
Pulled 6-5/8" casing loose and out a				hole was filled	1645'	6-5/8"
	Clay	1660	1600			
	Cement	1600	1590			
Permanent	Bridge	1255	1250			
COAL SEAMS	Cement	1250	1240	DESCRIPTION OF MONUMENT		
(NAME)	Stone	1240	1235	18"X18"X 30" Concrete Block		
(NAME)	Red Clay	1235	950	January 29, 1949		
(NAME)	Cement	950	940			
(NAME)	Con't on reverse side					

and that the work of plugging and filling said well was completed on the 29 day of January, 1949.

And further deponents saith not.

Guadalupe Saenz
O. R. DeLay

Sworn to and subscribed before me this 23 day of Feb. 1949.

James C. Cartwright
Notary Public.

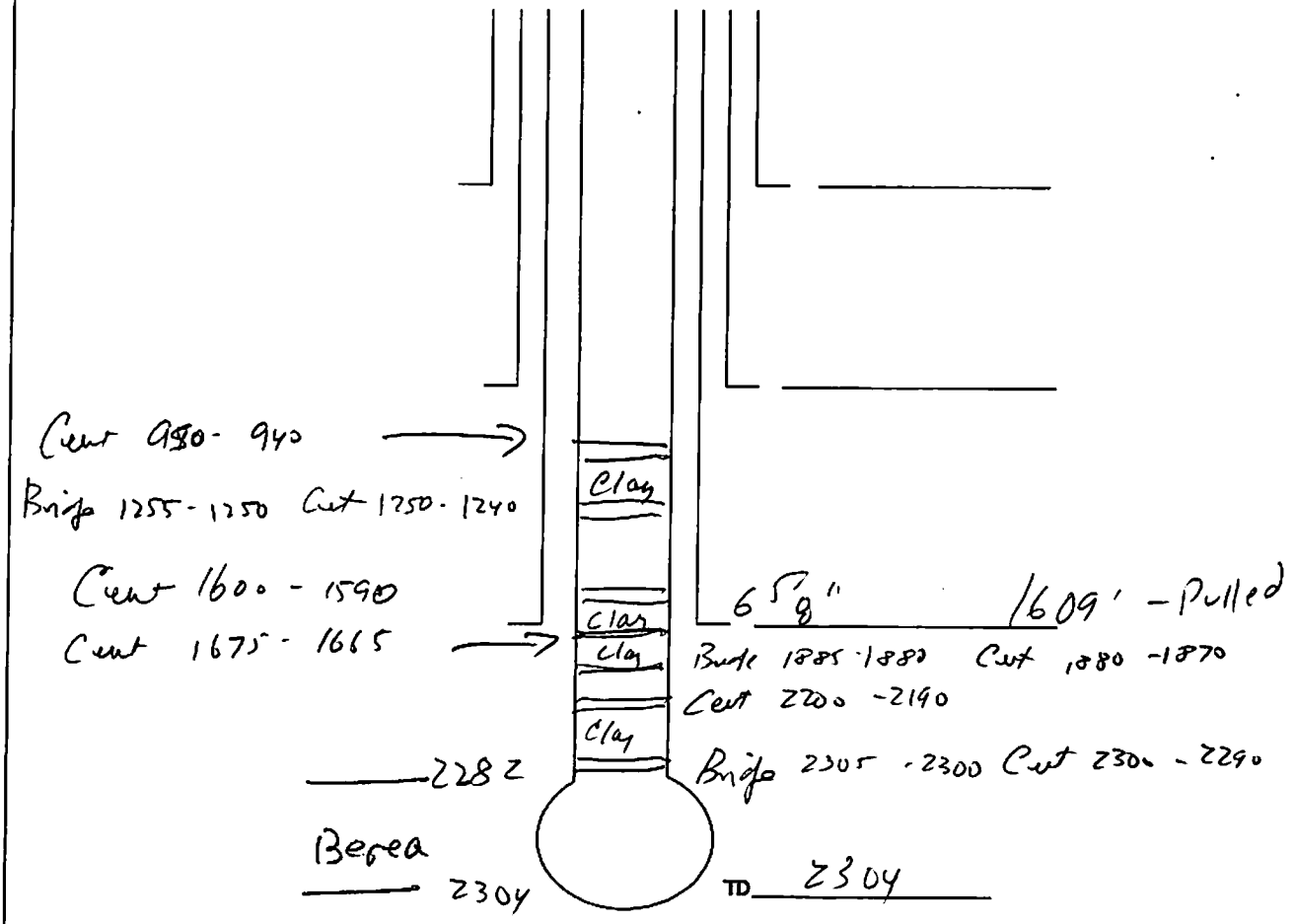
My commission expires: July 9 1951

Permit No. Lin-569

Oliver Hill 16

Griffithsville Unit #2 Field

47-043- 30574



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

(173)

AOR - Well Review Checklist

API Number: 47- 043 - 30564 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 17
Farm Name: Ohio A 11
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2319
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 416,747 Northing: 4,232,750
Elevation: 246
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043 - 30564

RECORD of Well No. 17 on Allen Hill Farm Acres
Field, District County
Rig Commenced 19 , Completed 19
Drilling Commenced July 12 1916, Completed Aug 23 1916
Cost per foot, 1¼ Contractor Boone Drilling Co Address,
Drillers' Names A M Shubeck & B A DeLong

CONDUCTOR AND CASING USED IN DRILLING

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅝ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 3-16 Inch	4¾ Inch
12				325		1616				

CONDUCTOR AND CASING LEFT IN WELL

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅝ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 3-16 Inch	4¾ Inch
12						1616				

OIL WELL — GAS WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods		Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure
First	80 qrt.									

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Soil		12	12	
Sand	12	52	40	
Slate	52	100	48	
Sand	100	160	60	Hole full Water 110'
Slate	160	250	90	
Sand	250	325	75	
Slate	325	400	75	
Sand	400	550	150	
Slate	550	625	75	
Sand	625	700	75	
Slate	700	790	90	
Sand	790	850	60	
Slate	850	915	65	
Sand	915	930	15	Hole full Salt Water 985'
Slate	930	940	10	
Salt Sand	940	1570	630	
Black Lime	1570	1605	35	
Pencil Cave	1605	1610	5	
Big Lime	1610	1790	180	
Keener Sand	1790	1850	60	
Slate	1850	1950	100	
Shells	1950	2075	125	
Slate	2075	2278	203	
Keener Sand	2278	2298	20	
Berea Grit	2298	2319	21	

47.043 - 30564

FORM GG-6

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

South Penn Natural Gas Co.
LEASE OR PROPERTY OWNER

~~Fay~~ Parkersburg, W. Va.
ADDRESS

C. R. DeLay
NAME OF WELL OPERATOR

P. O. Box 49 Hamlin, W. Va.
COMPLETE ADDRESS

February 3, 1949
WELL AND LOCATION

Duval District

Lincoln County

Well No. 17

O. Hill Farm

STATE INSPECTOR SUPERVISING PLUGGING D. E. Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

C. R. DeLay and Bethel Wade 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 C. R. DeLay, well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 20 day of January, 1949, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD	FILLING MATERIAL			PLUGS USED	CASING	
FORMATION	CONTENT	FROM	TO	SIZE & KIND	CSG PULLED	CSG LEFT IN
	Red Clay	2319	2200			
	Cement	2200	2190			
	Stone	2190	2185			
Parmanent Bridge		1885	1880			
	Cement	1880	1870			
	Stone	1870	1865			
	Red Clay	1865	1646			
	Cement	1646	1635			
	Stone	1635	1630			
Pulled casing loose and out as hole was filled					1616	6-5/8"
Permanent Bridge		1155	1150			
	Cement	1150	1140			
	Stone	1140	1135			
	Clay	1135	800			
	Cement	800	790			
COAL SEAM	Permanent Bridge	255	250	DESCRIPTION OF MONUMENT		
(NAME)	Cement	250	240	18" X 18" X 30 Concrete Block		
(NAME)	Stone	240	235	January 28, 1949		
(NAME)	Filled with clay to surface					
(NAME)						

and that the work of plugging and filling said well was completed on the 28 day of January, 1949.

And further deponents saith not.

Bethel Wade
C. R. DeLay

Sworn to and subscribed before me this 3 day of February, 1949.

J. H. Carlson
Notary Public.

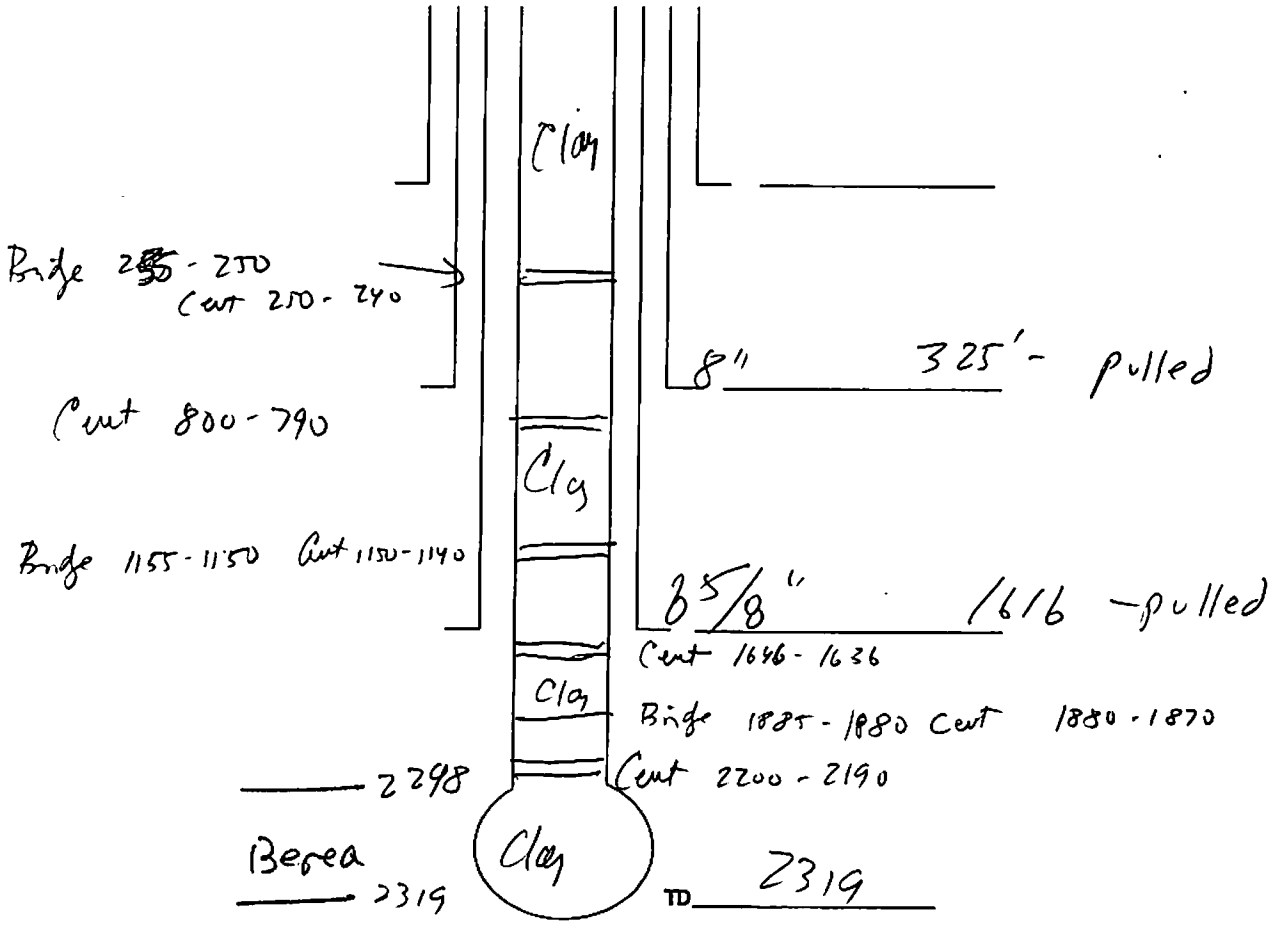
My commission expires: July 9 1958

Permit No. 564

O Hill 17

Griffithsville Unit #2 Field

47-043- 30564



From Drillers Records/Plugging Records

(174)

WVDEP OOG Internal Use Only
Rev. 6/14/16

AOR - Well Review Checklist

API Number: 47- 043 - 31042 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 18
Farm Name: Oliver Hill
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2403
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 416,635 Northing: 4,232,927
Elevation: 276'
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-3104?

RECORD of Well No. 18 on Oliver Heirs Farm Acres
Field, Newell District Lincoln County Wetzel
Rig Commenced July 13 1917. Completed July 23 1917
Drilling Commenced July 24 1917. Completed Sept 1 1917
Cost per foot, Contractor, Boone Drlg Co Address,
Drillers' Names

CONDUCTOR AND CASING USED IN DRILLING

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7¾ Inch	6¾ Inch	6¼ Inch	5¼ Inch	5 3-16-Inch	4¼ Inch
14						1705				

CONDUCTOR AND CASING LEFT IN WELL

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7¾ Inch	6¾ Inch	6¼ Inch	5¼ Inch	5 3-16 Inch	4¼ Inch
14						1705				

OIL WELL — GAS WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods	Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure
9-3-17	80 qts	5 bbls							

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Conductor		14		
Sand	14	50		
Slate	50	100		
Sand	100	200		
Slate	200	350		
Coal	350	355		
Slate	355	375		
Sand	375	400		
Slate	400	458		
Sand	458	630		
Slate	630	770		
Sand	770	805		
Slate	805	960		
Sand	960	995		
Slate	995	1030		
Salt Sand	1030	1660		
Slate	1660	1663		
Little Lime	1663	1693		
Pencil Cave	1693	1698		
Big Lime	1698	1888		
Injun Sand	1888	1953		
Slate	1953	2018		
Shells	2018	2168		
Slate	2168	2365		
Brown shale	2365	2385		
Berea Sand	2385	2403	2385	
Total depth		2403	2403	

47-043-31042

FORM GG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE. ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

LEASE OR PROPERTY OWNER

ADDRESS

G. S. H. Supply Co.
NAME OF WELL OPERATOR
Griffithsville, W. Va.
COMPLETE ADDRESS
July 12, 19 52
WELL AND LOCATION
Duval District
Lincoln County
Well No. 18
Oliver Hill Farm
STATE INSPECTOR SUPERVISING PLUGGING Dana E. Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

and
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 G. S. H. Supply Co., well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 2 day of Dec, 19 51, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD	FILLING MATERIAL	PLUGS USED	CASING	
FORMATION		SIZE & KIND	CSG PULLED	CSG LEFT IN
	set bridge 2365'	7"	1705'	none
	2 bags cement	2" tubing	2395'	none
	5' crushed stone			
	Filled w/ clay 2350' to 2365'			
	2 bags cement 2350' to 2355'			
	set bridge 2050'			
	10 bags cement			
	5' crushed stone			
	Filled w/ clay 2035' to 1735'			
	neat cement 1735' to 1725'			
	crushed stone 5'			
	set bridge 1230'			
	2 bags cement			
	5' crushed stone			
	Filled w/ clay 1215' to 1010'			
	neat cement 1010' to 1000'			
	set bridge 150'			
	2 bags cement			
COAL SEAMS	5' crushed stone	DESCRIPTION OF MONUMENT		
	filled w/ clay 385'			
(NAME)	neat cement 385' to 330'	Erected monument according to rule 10, 1937 regulations.		
(NAME)	5' crushed stone on cement			
(NAME)	filled w/ clay to surface			
(NAME)				

RECEIVED
MAY 1952
WEST VIRGINIA
DEPARTMENT OF MINES
OIL & GAS DIVISION

and that the work of plugging and filling said well was completed on the 6 day of Dec., 19 51

And further deponents saith not.

D. L. Stephens Jr
C. A. Reed

Sworn to and subscribed before me this 14 day of May, 1952.

J. R. Dotson
Notary Public.

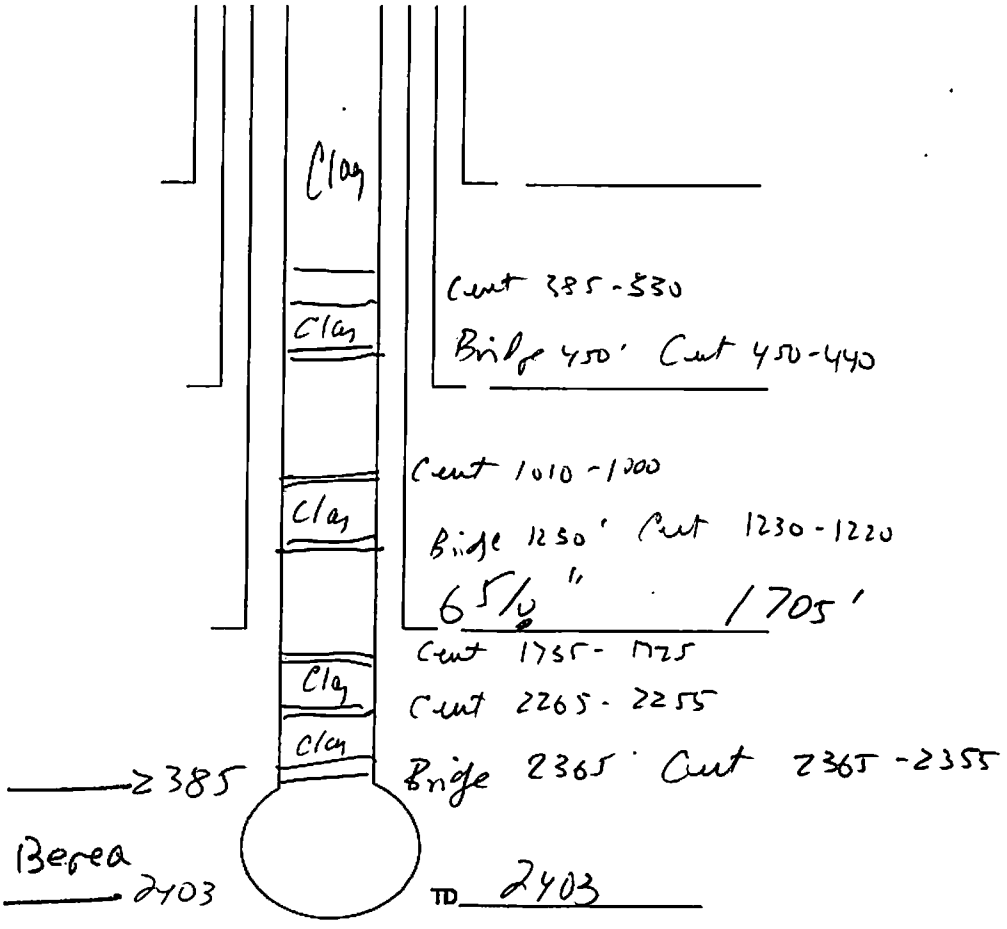
My commission expires: Oct 9-1957

Permit No. Lin-1042

O Hill B

Griffithsville Unit #2 Field

47-043- 3104 2



From Drillers Records/Plugging Records

(175)

WVDEP OOG Internal Use Only
Rev. 6/14/16

AOR - Well Review Checklist

API Number: 47- 043 - 31043 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 19
Farm Name: O Hill
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2359
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 416,830 Northing: 4,232,954
Elevation: 277
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = 0
Bottom Hole Injection Pressure 0
Hydrostatic Pressure 0

Comments:

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-31043

RECORD of Well No. 19 on Oliver Isbell Farm ..... Acres .....
..... Field, ... District ..... County .....
Rig Commenced ..... 10..., Completed ..... 19 ...
Drilling Commenced ..... June 7 1917 Completed July 10 1917
Cost per foot, 1.25 Contractor Davis Drilling Co. Address, Glenville, W. Va.
Drillers' Names J. W. Davis & A. A. Delong

CONDUCTOR AND CASING USED IN DRILLING

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅛ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 3-16-Inch	4⅝ Inch
14						1665				

CONDUCTOR AND CASING LEFT IN WELL

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅛ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 3-16 Inch	4⅝ Inch
14						1665				

OIL WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods		Size of Packer	Depth Set
7/12/17	80 qts.						

GAS WELL

Tubing	1st Minute Pressure	Rock Pressure

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Clay		14	14	
Sand	14	100	86	
Slate	100	140	40	
Sand	140	250	110	
Slate	250	300	30	
Sand	300	350	50	
Coal	350	355	5	
Slate	355	390	35	Hole reduced 10" hole 365'
Sand	390	600	210	
Slate & Shells	600	940	340	
Salt Sand	940	1600	660	Hole full Water 1020'
Slate	1600	1625	25	
Little Lime	1625	1655	30	
Pencil Cave	1655	1660	5	
Big Lime	1660	1850	190	
Injun Sand	1850	1915	65	
Slate	1915	1980	65	
Shells	1980	2130	150	
Slate & Shells	2130	2319	189	
Brown Shale	2319	2339	20	
Berea sand	2339	2359	20	

47-043-3104 3

FORM OG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

LEASE OR PROPERTY OWNER

ADDRESS

NAME OF WELL OPERATOR: G. S. H. Supply Co.

COMPLETE ADDRESS: Griffithsville, W. Va.

May 13, 1952

WELL AND LOCATION: Duval District; Lincoln County; Lincoln

Well. No. 19

Farm: Oliver Hall

STATH INSPECTOR SUPERVISING PLUGGING: Dana E. Lorson

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

and

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 G. S. H. Supply Co., well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 17 day of Jan, 19 52 and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD	FILLING MATERIAL	PLUGS USED	CASING	
FORMATION		SIZE & KIND	CSG PULLED	CSG LEFT IN
	Set bridge 2655'	7"	1665'	none
	2 bags cement	2" tubing	2551'	none
	5' crushed stone			
	filled w/ clay 2655' to 2195'			
	neat cement 2195' to 2185'			
	set bridge 1815'			
	2 bags cement			
	5' crushed stone			
	filled w/ clay 1800' to 1695'			
	neat cement 1695' to 1665'			
	crushed stone 5'			
	set bridge 1210'			
	2 bags cement			
	5' crushed stone			
	filled w/ caly 1125' to 920'			
	neat cement 920' to 910'			
	set bridge 350'			
	2 bags cement			
	5' crushed stone			
	filled w/ clay 335' to surface			
COAL SEAMS		DESCRIPTION OF MONUMENT		
(NAME)		Erected marker according to rule 18, 1931 regulations.		
(NAME)				
(NAME)				
(NAME)				

MAY 1952 WEST VIRGINIA DEPARTMENT OF MINES

and that the work of plugging and filling said well was completed on the 9th day of Jan., 19 52

And further deponents saith not.

L. E. Stephens Jr
O. A. Reiner

Sworn to and subscribed before me this 14 day of May, 1952.

J R Williams
Notary Public.

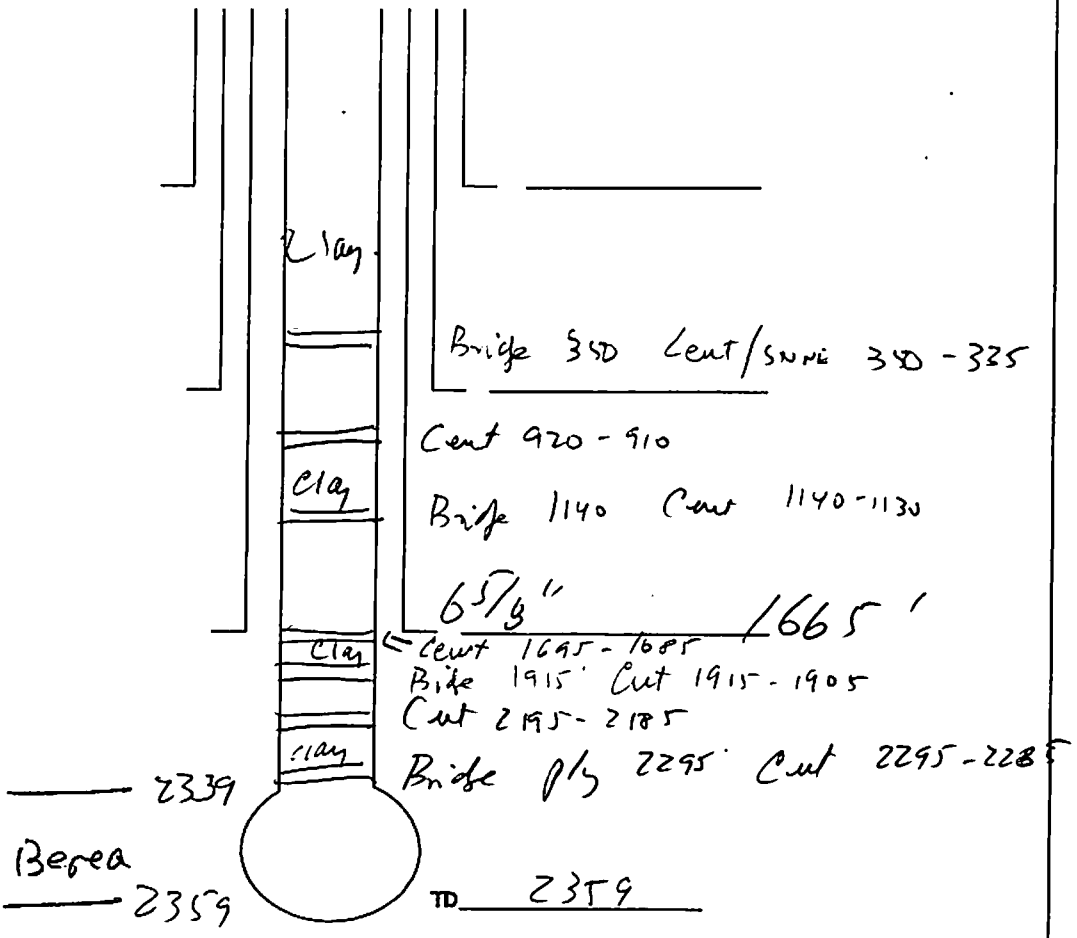
My commission expires:
10-9-57

Permit No. Lin- 1043

O Hill 19

Griffithsville Unit #2 Field

47-043- 31043



From Drillers Records/Plugging Records

(176)

WVDEP OOG Internal Use Only
Rev. 6/14/16

AOR - Well Review Checklist

API Number: 47- 043 - 30446 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 1
Farm Name: Cordelia Holton
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2584
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 417,145 Northing: 4,234,131
Elevation: 328
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☐

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

WR 38 - NA

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47.043 - 3044

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

WELL RECORD

Permit No. _____ ABANDONMENT Oil or Gas Well Oil (KIND)

Company UNITED FUEL GAS CO.
Address P.O. Box 1273, Charleston 25, W. Va.
Farm Cordelia Holton Acres 30
Location (waters) Br. of Tango
Well No. 1 Elev. 1075.3
District Duval County Lincoln
The surface of tract is owned in fee by
Address
Mineral rights are owned by Cordelia Holton
Hamlin, Address West Virginia
Drilling commenced Not Given
Drilling completed 12-17-08
Date Shot 5-18-10 From To
With 2-11-12 100, & 110 Qts.
Open Flow /10ths Water in Inch
/10ths Merc. in Inch
Volume Cu. Ft.
Rock Pressure lbs. hrs.
Oil 8 bbls., 1st 24 hrs.
Fresh water feet feet
Salt water 1220 feet feet

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			
16			Kind of Packer
13			
10			Size of
8¼			
6⅝	1870'	1870'	Depth set
5 3/16	1950'	1950'	
3			Perf. top
2 Tubing		2584'	Perf. bottom
Liners Used			Perf. top
			Perf. bottom

CASING CEMENTED SIZE No. Ft. Date

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

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks
Salt Sand			1175	1830	Gas	1183	
Little Lime			1830	1867	Water	1220	
Big Lime			1867	2060	Gas	1340	
Injun			2060	2120			
Slate & Shells			2120	2541			
Black Slate			2541	2561			
Berea			2561	2584			
Total Depth				2584'			

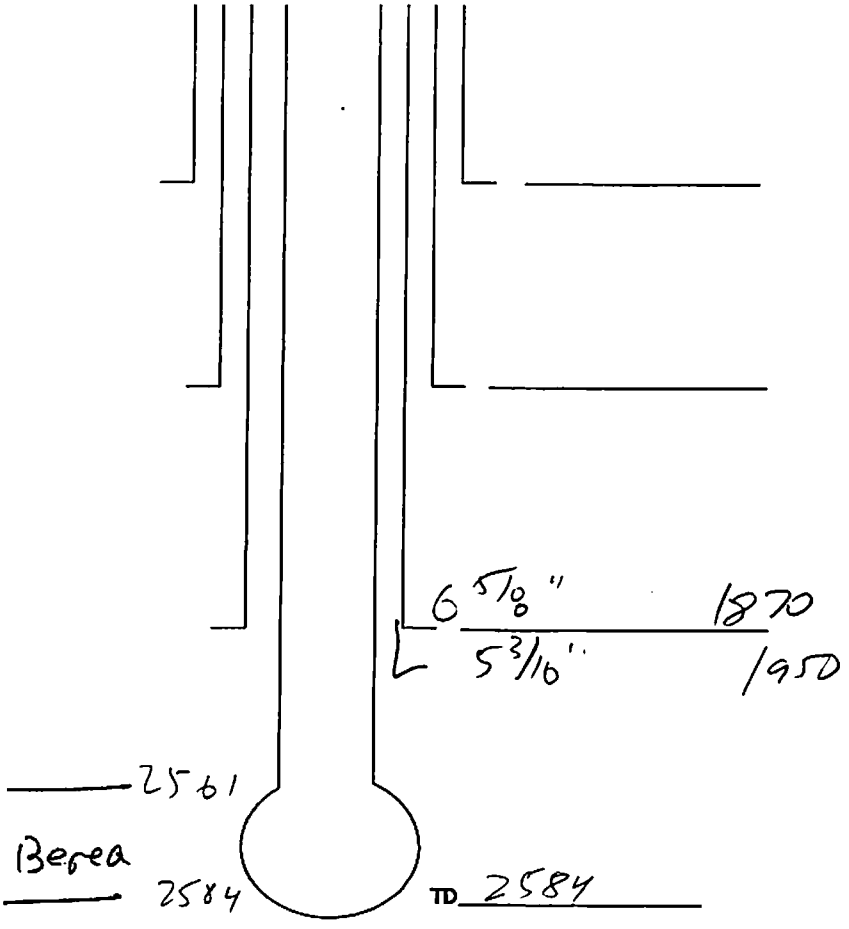
JUN 1940
WEST VIRGINIA DEPARTMENT OF MINES

(Over)

Cordelia 1-10/1-11

Griffithsville Unit #2 Field

47-043- 30446



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

(177)

AOR - Well Review Checklist

API Number: 47- 043 - Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 2
Farm Name: Cordelia Holton
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2563
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 417,101 Northing: 4,234,333
Elevation: 322
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = 0
Bottom Hole Injection Pressure 0
Hydrostatic Pressure 0

Comments:

Reviewer Name: Signature:
Date Reviewed:

** Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-30192

Production First 24 Hours from { Berea Sand Bbls. Approved.
{ Sand Bbls. By Supt.

Cordelia Holten Farm, No. of Lease 75040. No. Acres.

Duval District Lincoln County West Virginia State.

Well No. Two Date of Location 19

Rig Commenced 19 } Contractor.
Rig Completed 19

Drilling Commenced March 14th. 1910 } G.L.Titus & Company. Contractor.
Drilling Completed April 26th. 1910

CASING RECORD

Size	Changed to Well Feet	In.	Put in Well Feet	In.	Bottom of Casing Feet	In.	Pulled out of Well Feet	In.	Left in Well Feet	In.	Transferred before completion Feet	In.	Left at well not in use Feet	In.
6-5/8	1885		1865		1885		1885		1885					
5½	1922		1922				1922							

Formation	Top	Bottom	Thickness
Salt Sand	1170	1675	
Little Lime	1835	1875	
Pencil Cave	1871	1879	
Big Lime	1880	2065	
Big Injun Sand	2065	2115	
Slate & Shells	2115	2215	
Black Lime	2215	2295	
Slate & Shells	2295	2525	
Coffee Slate	2523	2543	
Berea Sand	2543	2563	

Abandoned Sep.6-1939.

Total Depth, 2565

SHOT RECORD

Month	Day	Yr.	Size Shot	Length of Shell	Top of Shot	Bottom of Shot
10	26	10	90			

REMARKS:

Gas in Salt Sand at 1185'
Water in Salt Sand at 1260'

ABANDONED

Size	Casing Pulled	Casing Left In	

REMARKS: El.=1251.80

47-043 - 30192

Form G-5

AFFIDAVIT IN TRIPLICATE TO TIME AND MANNER OF PLUGGING AND FILLING WELL

(Required by Section 9, Article 4, Chapter 22 of the Code)

WEST VIRGINIA DEPARTMENT OF MINES

OIL AND GAS DIVISION Permit No. LIN-192

Cordelia Holton,
COAL OPERATOR OR OWNER

Hamlin, W. Va.
ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

Cordelia Holton.
LEASE OR PROPERTY OWNER

Hamlin, W. Va.
ADDRESS

SOUTH PENN OIL COMPANY,
NAME OF WELL OPERATOR

411 Seventh Avenue, Pittsburgh, Pa.
COMPLETE ADDRESS

September 21, 1939.

WELL AND LOCATION

Duval District

Lincoln County

Well No. 2

Cordelia Holton Farm

AFFIDAVIT TO BE MADE IN TRIPLICATE, ONE COPY TO BE MAILED BY REGISTERED MAIL TO THE DEPARTMENT, ONE COPY TO BE RETAINED BY THE WELL OPERATOR AND THE THIRD COPY (AND EXTRA COPIES IF REQUIRED) TO BE MAILED TO EACH COAL OPERATOR ABOVE NAMED AT THEIR RESPECTIVE ADDRESSES.

AFFIDAVIT

STATE OF WEST VIRGINIA,
COUNTY OF Lincoln } ss:

G. H. Crummett

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 South Penn Oil Company, well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 14th day of August, 1939, and that the well was plugged and filled in the following manner:

Manner in which sand was plugged:

Total Depth 2565'. Filled with clay to 2523',- 20' above Berea Sand. Set cement plug 2523' - 2513',- sealing Berea Sand. Bridged hole at 2145',- 30' below Big Injun Sand. Filled with clay to 2045',- 20' above Big Injun Sand. Set cement plug 2045' - 2035',- sealing Big Injun Sand. Pulled 5-3/16" casing,- 1922'. Filled with clay to 1885', Pulled 6-5/8" casing,- 1885'. Filled with clay to 1860',- 20' above Big Lime. Set cement plug 1860' - 1850',- sealing Big Lime. Filled with clay to 1815',- 20' above Little Lime. Set cement plug 1815' - 1805',- sealing Little Lime. Bridged hole at 1703',- 30' below Salt Sand. Filled with clay to 1150',- 20' above Salt Sand. Set cement plug 1150' - 1140',- sealing Salt Sand. Filled with clay to surface.

Manner in which coal was protected:

Description of monument: Erected marker as described in Rule 18, 1931 Regulations. All work done in workmanlike manner.

(THE ABOVE QUESTIONS MUST BE IN DETAIL AND IN ACCORDANCE WITH THE PROVISIONS OF SECTION 10, ARTICLE 4, CHAPTER 22 OF THE CODE)

And that the work of plugging and filling said well was completed on the 6th day of September, 1939.

And further deponents saith not.

G H Crummett

Sworn to and subscribed before me this 25th day of September, 1939.

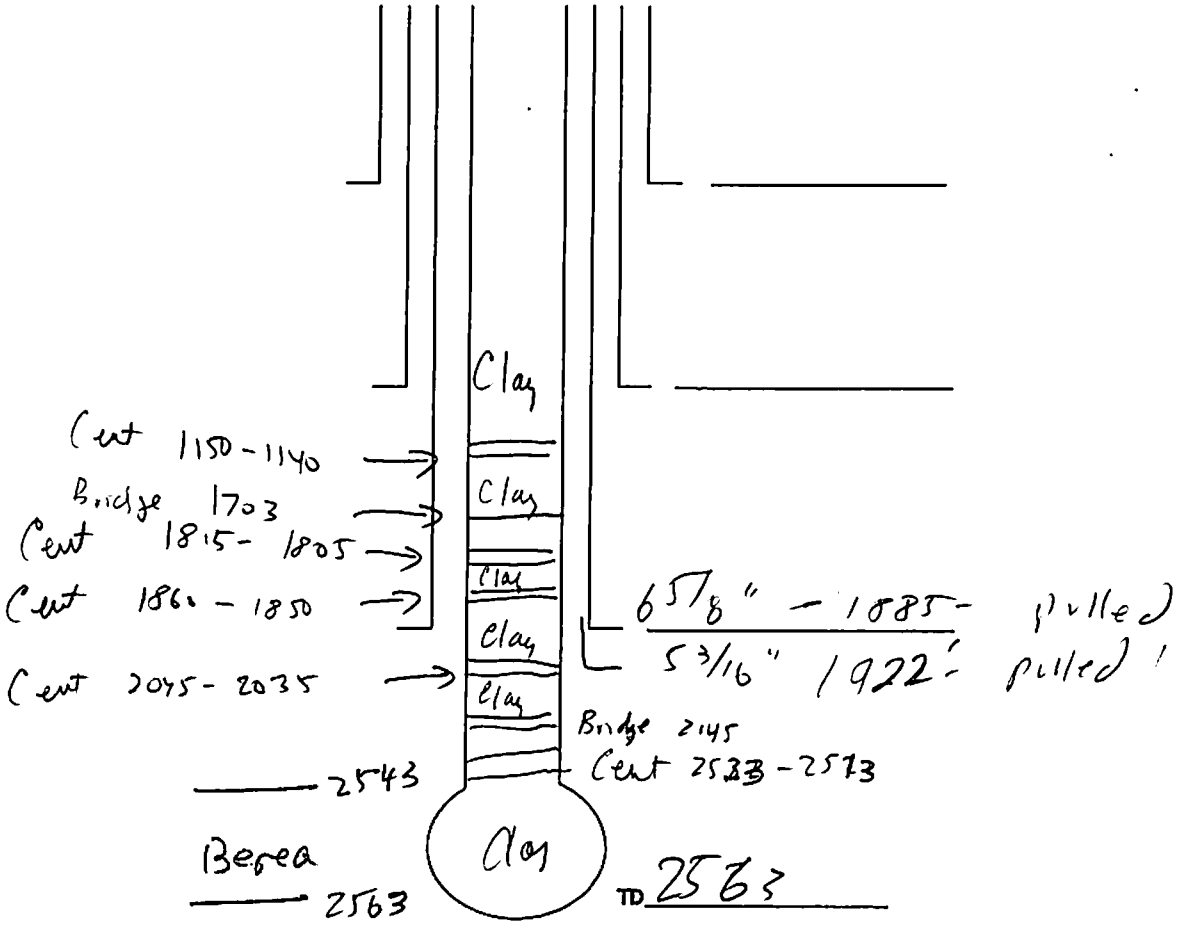
H. Smith
Notary Public.

My Commission expires:
Dec. 7-1947

Cordelia Holton 2

Griffithsville Unit #2 Field

47-043- 30 192



From Drillers Records/Plugging Records

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WVDEP OOG Internal Use Only
Rev. 6/14/16

AOR - Well Review Checklist

API Number: 47- 043 - 30447 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 3
Farm Name: Cordelia Holden
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (Non Waterflood) ☐ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2471
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 417,358 Northing: 4,234,421
Elevation: 293
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = 0
Bottom Hole Injection Pressure 0
Hydrostatic Pressure 0

Comments:

Reviewer Name: Signature:
Date Reviewed:

** Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47.043 - 30447

Production First 24 Hours from { Berea Sand Bbls. / Sand Bbls. } Approved. By Supt.

Cordelia Holten Farm, No. of Lease No. Acres.

Duval District Lincoln County West Virginia State.

Well No. Three Date of Location 19

Rig Commenced 19 / Rig Completed 19 } Contractor.

Drilling Commenced September 10th. 19 10 / Drilling Completed October 22nd. 19 10 } G.L. Titus & Company. Contractor.

CASING RECORD

Size	Charged to Well Feet	In.	Put in Well Feet	In.	Bottom of Casing Feet	In.	Pulled out of Well Feet	In.	Left in Well Feet	In.	Transferred before completion Feet	In.	Left at well not in use Feet	In.
6-5/8	1765		1765		1765				1765					

Formation	Top	Bottom	Thickness
Red Rock		160	
Sand & Slate	160	596	
Coal	596	600	
Slate & Sand	600	1075	
Salt Sand	1075	1680	
Maxon Sand	1680	1720	
Little Lime	1720	1750	
Pencil Cave	1750	1765	
Big Lime	1765	1955	
Big Injun Sand	1945	1995	
Black Sand	1995	2015	
Slate	2015	2110	
Black Lime	2110	2190	
Berea Sand	2453	2471	
Total Depth.		2471	

SHOT RECORD

Month	Day	Yr.	Size Shot	Length of Shell	Top of Shot	Bottom of Shot
10	25	10	60			

REMARKS:

Water in Salt Sand at 1137'

Gas & Water in Salt Sand at 1100'

ABANDONED 19

Size	Casing Pulled	Casing Left In

REMARKS: El = 977.96

47-043 - 30447

Form G-9

AFFIDAVIT IN TRIPLICATE TO TIME AND MANNER OF PLUGGING AND FILLING WELL

(REQUIRED BY SECTION 9, ARTICLE 4, CHAPTER 22 OF THE CODE)

WEST VIRGINIA DEPARTMENT OF MINES

OIL AND GAS DIVISION

_____ COAL OPERATOR OR OWNER

_____ ADDRESS

_____ COAL OPERATOR OR OWNER

_____ ADDRESS

_____ COAL OPERATOR OR OWNER

Cordelia Holton
Hamlin, W. Va.
ADDRESS

United Fuel Gas Company
NAME OF WELL OPERATOR

Charleston, West Virginia
COMPLETE ADDRESS

August 28 19 48

WELL AND LOCATION

Duvall District

Lincoln County

Well No. 3

Cordelia Holton Farm

State Inspector Supervising Plugging D. E. Lawson

AFFIDAVIT TO BE MADE IN TRIPLICATE, ONE COPY TO BE MAILED BY REGISTERED MAIL TO THE DEPARTMENT, ONE COPY TO BE RETAINED BY THE WELL OPERATOR AND THE THIRD COPY (AND EXTRA COPIES IF REQUIRED) TO BE MAILED TO EACH COAL OPERATOR ABOVE NAMED AT THEIR RESPECTIVE ADDRESSES.

AFFIDAVIT

STATE OF WEST VIRGINIA,
COUNTY OF Lincoln } ss:

R. J. Elkins and Kenzie Browning

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 R. H. Adkins, well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 10th day of August, 19 48, and that the well was plugged and filled in the following manner:

Manner in which sand was plugged:

	From	To	Csg. Pulled
Clay	2432	2532	2471 2" Tubing
Cement Plug	2532	2542	
Bridge	2025		
Mud Clay	2025	1793-30'	Below Pipe
Cement Plug	1793	1783	8" Casing (1763 Csg Pulled)
Mud Clay	1783	1055	
Cement Plug	1055	1045	

Manner in which coal was plugged:

Bridge	200	
Cement Plug	200	190
Clay	190	

SEP 1948 WEST VIRGINIA DEPARTMENT OF MINES

Description of monument: U.F.G.Co. Cordelia Holton No.3 Abandoment 8-13-48

(THE ABOVE DESCRIPTIONS MUST BE IN DETAIL AND IN ACCORDANCE WITH THE PROVISIONS OF SECTION 10, ARTICLE 4, CHAPTER 22 OF THE CODE)

and that the work of plugging and filling said well was completed on the 19th day of Aug., 19 48.

And further deponents saith not.

R Elkins Jr

Kenzie Browning

Sworn to and subscribed before me this 28th day of August, 19 48.

Notary Public.

My Commission expires:

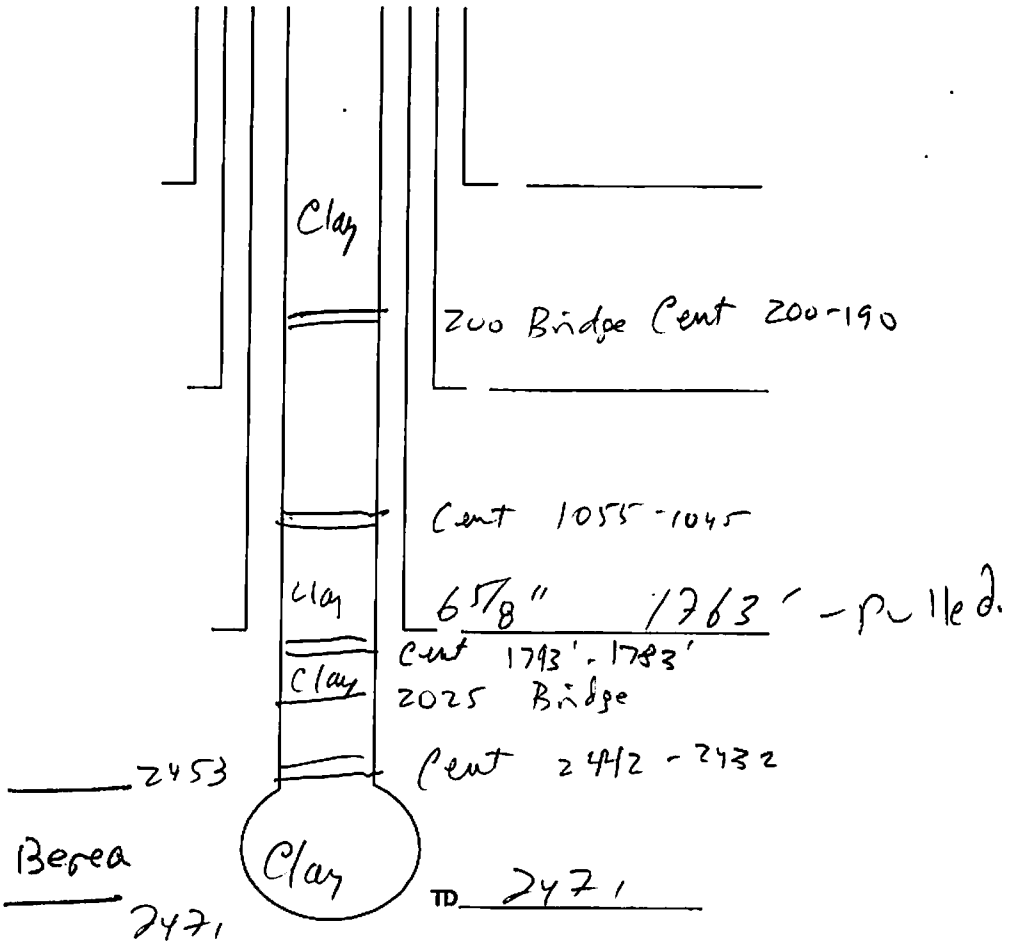
February 1949

Permit No. Lin-447

Cordelia Holton 3

Griffithsville Unit #2 Field

47-043- 30447



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

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AOR - Well Review Checklist

API Number: 47- 043 - Area Permit Number: 2R AP

Operator Name: H 6 Energy

Operator's Well #:

Farm Name: R L Hoffman

Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐

Well Status: Active ☐ Abandoned ☐ Plugged ☒

TD of well:

Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐

Easting: 416,733 Northing: 4,233,460

Elevation: 230

Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☐

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**

Bottom Hole Injection Pressure **0**

Hydrostatic Pressure **0**

Comments:

38 +35 NA

Reviewer Name: Signature:

Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

WVDEP OOG Internal Use Only
Rev. 6/14/16

(180)

AOR - Well Review Checklist

API Number: 47- 043 - 30743 Area Permit Number: 2R AP

Operator Name: H 6 Energy

Operator's Well #: 2

Farm Name: R L Huffman

Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐

Well Status: Active ☐ Abandoned ☐ Plugged ☒

TD of well:

Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐

Easting: 417,320 Northing: 4,233,402

Elevation: 312'

Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐	
Date of Last MIT:	Passed?	No ☐	Yes ☐	
Open Hole Completion		No ☐	Yes ☒	
Well penetrates injection zone?		No ☐	Yes ☒	
Well perforated in injection zone?		No ☒	Yes ☐	
Cemented across injection zone?		No ☒	Yes ☐	
Packer immediately above injection zone (<100')?		No ☐	Yes ☐	No Packer ☐
		If No: Provide Depth:		
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒	

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**

Bottom Hole Injection Pressure **0**

Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:

Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

08-10-1

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

WELL RECORD 47-043-30743

Oil or Gas Well _____ (KIND)

Permit No. _____

Company United Fuel Gas Company
Address P. O. Box 1273 - Charleston, W. Va.
Farm R. L. Huffman Acres _____
Location (waters) _____
Well No. 2 Elev. _____
District Duval County Lincoln
The surface of tract is owned in fee by _____
Address _____
Mineral rights are owned by _____
Address _____
Drilling commenced _____
Drilling completed June 28, 1910
Date Shot _____ From _____ To _____
With _____
Open Flow _____ /10ths Water in _____ Inch
_____ /10ths Merc. in _____ Inch
Volume _____ Cu. Ft.
Rock Pressure _____ lbs. _____ hrs.
Oil _____ bbls., 1st 24 hrs.
Fresh water _____ feet _____ feet
Salt water _____ feet _____ feet

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Packer
16			
13			Size of
10	16	16	
8¼			Depth set
6⅝	1845	1845	
5 3/16			Perf. top
3" anchor	30	30	Perf. bottom
2	2527	2527	Perf. top
Liners Used			Perf. bottom

CASING CEMENTED _____ SIZE _____ No. Ft. _____ Date _____

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

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks
Salt Sand			1160	1795			
Little Lime			1805	1835			
Pencil Cave			1835	1840			
Big Lime			1840	2030			
Big Injun			2030	2095			
Brown Shale			2493	2511			
Berea			2511	2533			

MAY 1949
WEST VIRGINIA
DEPARTMENT OF MINES

(Over)

47.043 - 30743

FORM GG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

LEASE OR PROPERTY OWNER

ADDRESS

United Fuel Gas Company
NAME OF WELL OPERATOR

Charleston, W. Va.
COMPLETE ADDRESS

July 12 19 49
WELL AND LOCATION

Duval District

Lincoln County

Well No. 2

R. L. Huffman Farm

STATE INSPECTOR SUPERVISING PLUGGING D. E. Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

Clyde Satterfield and E. J. Elkins, Jr.
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 R. H. Adkins, well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 13 day of June, 19 49, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD	FILLING MATERIAL			PLUGS USED	CASING	
	CONTENT	FROM	TO	SIZE & KIND	CSG PULLED	CSG LEFT IN
PULLED 2" Tubing						
SET A PERMANENT BRIDGE AT 2400' - 21' above Berea Sand. 2 sacks neat cement and 5' crushed stone on bridge. Filled with clay to 2390', neat cement to 2380'.						
SET A PERMANENT BRIDGE AT 2100' - bottom of Big Injun. 2 sacks neat cement and 5' crushed stone on bridge. Filled with clay to 1875' - 30' below 6-5/8" casing neat cement 1875' - 1855'. 5' crushed stone on cement plug. Sealing hole completely below 6-5/8" casing.						
PULLED CASING AS BALANCE OF HOLE WAS FILLED AND PLUGGED. Continued filling with clay to 1600' - top of Little Lime. Neat cement 1600' - 1790'.						
SET A PERMANENT BRIDGE AT 1350' - a point in the Salt Sands. 2 sacks neat cement and 5' crushed stone on bridge. Filled with clay to 1140' - 20' above Salt Sands. Neat cement 1140' - 1130'.						
SET A PERMANENT BRIDGE AT 350'. 2 sacks neat cement and 5' crushed stone on bridge. Filled with clay to surface. Erected marker such as is described in Rule 18, 1931 regulations						

COAL SEAMS	DESCRIPTION OF MONUMENT
(NAME)	U. F. GAS CO.
(NAME)	R. L. Huffman # 2
(NAME)	Date of Abandonment
(NAME)	

and that the work of plugging and filling said well was completed on the 21 day of June, 1949.

And further deponents saith not.

Clyde Satterfield
E. J. Elkins, Jr.

Sworn to and subscribed before me this 16 day of July, 19 49.

Notary Public.

My commission expires:
April 1, 1957

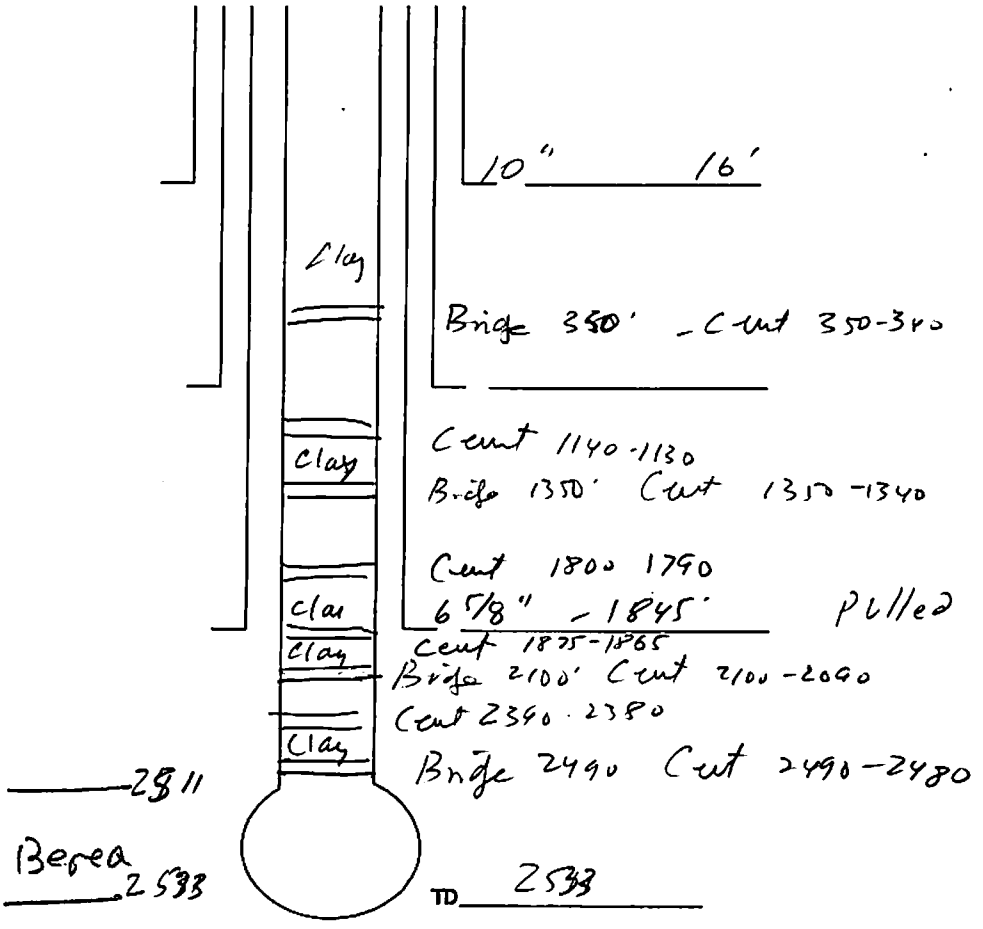
Permit No. LIN-743

125

R L Hoffman 2

Griffithsville Unit #2 Field

47-043- 30743



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

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AOR - Well Review Checklist

API Number: 47- 043 - 30945 Area Permit Number: 2R AP

Operator Name: H 6 Energy

Operator's Well #: 3

Farm Name: R L Hoffman

Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐

Well Status: Active ☐ Abandoned ☐ Plugged ☒

TD of well: 2318

Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐

Easting: 416,588 Northing: 4,233,358

Elevation: 252

Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = 0

Bottom Hole Injection Pressure 0

Hydrostatic Pressure 0

Comments:

Reviewer Name: Signature:

Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

47-043-30945

WELL RECORD

Oil or Gas Well _____ (KIND)

Permit No. _____

Company G. S. H. Supply Company
Address c/o Hallie Pack, Hamlin, West Virginia
Farm R. L. Huffman Acres _____
Location (waters) _____ Elev. _____
Well No. 3
District Duval County Lincoln
The surface of tract is owned in fee by _____
_____ Address _____
Mineral rights are owned by _____
_____ Address _____
Drilling commenced _____
Drilling completed _____
Date Shot _____ From _____ To _____
With _____
Open Flow _____ /10ths Water in _____ Inch
_____ /10ths Merc. in _____ Inch
Volume _____ Cu. Ft.
Rock Pressure _____ lbs. _____ hrs.
Oil _____ bbls., 1st 24 hrs.
Fresh water _____ feet _____ feet
Salt water _____ feet _____ feet

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Packer
16			
13			Size of
10			
8¼			Depth set
6⅝	1610'		
5 3/16			Perf. top
3			Perf. bottom
2	2312'		Perf. top
Liners Used			Perf. bottom

CASING CEMENTED _____ SIZE _____ No. Ft. _____ Date

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

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks
			920	1397			
Salt Sand			1557	1592			
Little Lime			1592	1600			
Pencil Cave			1600	1785			
Big Lime			1785	1850			
Big Injun			2270	2296			
Brown Shale			2296	2318			
Berea Sand							

DEC 1950
WEST VIRGINIA
DEPARTMENT OF MINES

47-043 - 30945

FORM OG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

LEASE OR PROPERTY OWNER

ADDRESS

G. S. H. Supply Company
NAME OF WELL OPERATOR
c/o Hallie Pack, Hamlin, West Va.
COMPLETE ADDRESS
January 22 19 51
WELL AND LOCATION
Duval District
Lincoln County
Well. No. 3
R. L. Huffman Farm

STATE INSPECTOR SUPERVISING PLUGGING D. E. Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

L. R. Thompson and Grant Pack 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 Hal Pack well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 10 day of January, 19 51, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD	FILLING MATERIAL			PLUGS USED	CASING	
FORMATION	CONTENT	FROM	TO	SIZE & KIND	CSG PULLED	CSG LEFT IN
	Bridge Set At	2276'		7"	1653'	None
	Neat Cement	2276'	2266'	2"	2330'	None
	Crushed Stone	5'				
	Clay		1640'			
	Neat Cement	1640'	1630'			
	Crushed Stone	5'				
	Bridge Set At	1280'				
	Neat Cement	1280'	1270'			
	Crushed Stone	5'				
	Clay		900'			
	Neat Cement	900'	890'			
	Crushed Stone	5'				
	Bridge Set At	350'				
	Neat Cement	350'	340'			
	Crushed Stone	5'				
COAL SEAMS	Clay to Surface			DESCRIPTION OF MONUMENT		
(NAME)				Erected Marker According Rule 18, 1931 Regulations		
(NAME)						
(NAME)						
(NAME)						

FEB 1951

and that the work of plugging and filling said well was completed on the 17 day of January, 19 51.

And further deponents saith not.

L. R. Thompson
Grant Pack

Sworn to and subscribed before me this 1st day of February, 19 51.

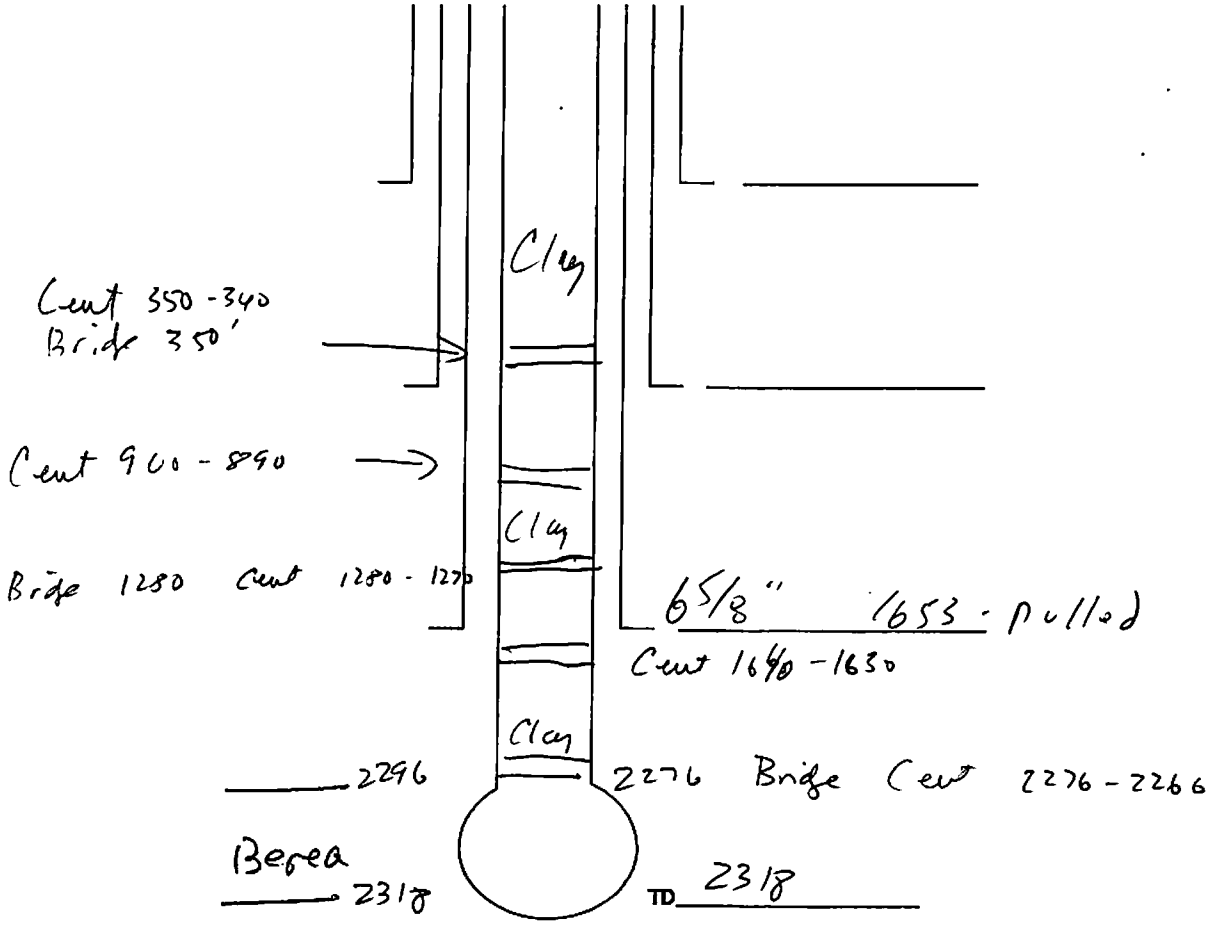
Notary Public.
Permit No. LIN-945

My commission expires:
Sept 1, 1957

R L Huffman 3

Griffithsville Unit #2 Field

47-043- 3094



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

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AOR - Well Review Checklist

API Number: 47- 043 - 30464 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 4
Farm Name: R L Huffman
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2240
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 416,625 Northing: 4,233,304
Elevation: 225
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

WELL RECORD

47-043-30464

Oil or Gas Well Gas (KIND)

Permit No.

Company United Fuel Gas Company
Address Charleston, West Virginia
Farm R. L. Huffman Acres 83
Location (waters) Bear Fork
Well No. 4 Elev.
District Duval County Lincoln
The surface of tract is owned in fee by
Address
Mineral rights are owned by R. L. Huffman
Address
Drilling commenced
Drilling completed April 1, 1912
Date Shot From To
With
Open Flow /10ths Water in Inch
/10ths Merc. in Inch
Volume Cu. Ft.
Rock Pressure lbs. hrs.
Oil bbls., 1st 24 hrs.
Fresh water feet feet
Salt water feet feet

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Packer
16			Gas Anchor
13			Size of 2"x6-5/8" x10"
10			
8¼			Depth set
6⅝	1550	1550	
5 3/16			Perf. top
3		2234	Perf. bottom
2			Perf. top
Liners Used			Perf. bottom

CASING CEMENTED SIZE No. Ft. Date

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

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks
			-	16			
Cond.			885	1365			
Salt Sand			1495	1525			
Little Lime			1525	1530			
Pencil Cave			1530	1730			
Big Lime			1730	1815			
Big Injun			2184	2219			
Brown Shale			2219	2240			
Berea							

JUN 1948
WEST VIRGINIA
DEPARTMENT OF MINES

(Over)

47-043- 30743

FORM OG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

LEASE OR PROPERTY OWNER

ADDRESS

United Fuel Gas Company
NAME OF WELL OPERATOR
Charleston, West Virginia
COMPLETE ADDRESS
July 22 19 48
WELL AND LOCATION
Duval District
Lincoln County
Well No. 4
R. L. Huffman Farm

STATE INSPECTOR SUPERVISING PLUGGING D. E. Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

W. C. Pack and L. R. Pack 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 Pack Plugging Company, well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 11th day of July, 19 48, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD	FILLING MATERIAL			PLUGS USED	CASING	
FORMATION	CONTENT	FROM	TO	SIZE & KIND	CSG PULLED	CSG LEFT IN
	Bridged At	2199				
	Mud Clay	2199	2099			
	Cement Plug	2099	2089			
	Bridged	1830				
	Mud Clay	1830	1580	30' Below pipe		
	Cement Plug	1580	1570			
	Mud Clay	1570	1475	2"	2234'	None
	Cement Plug	1475	1465			
	Bridged	200		7"	1125	425
	Cement Plug	200	190			
	Clay fill	190	0			

COAL SEAMS	DESCRIPTION OF MONUMENT
(NAME)	Monument 18x18x30
(NAME)	Inscription on monument
(NAME)	U.F.G.Co. R.L.Huffman No.4
(NAME)	Adm. 7-22-48

and that the work of plugging and filling said well was completed on the 18th day of July, 19 48

And further deponents saith not.

W C Pack
L R Pack

Sworn to and subscribed before me this 18 day of July, 1948.

Notary Public.

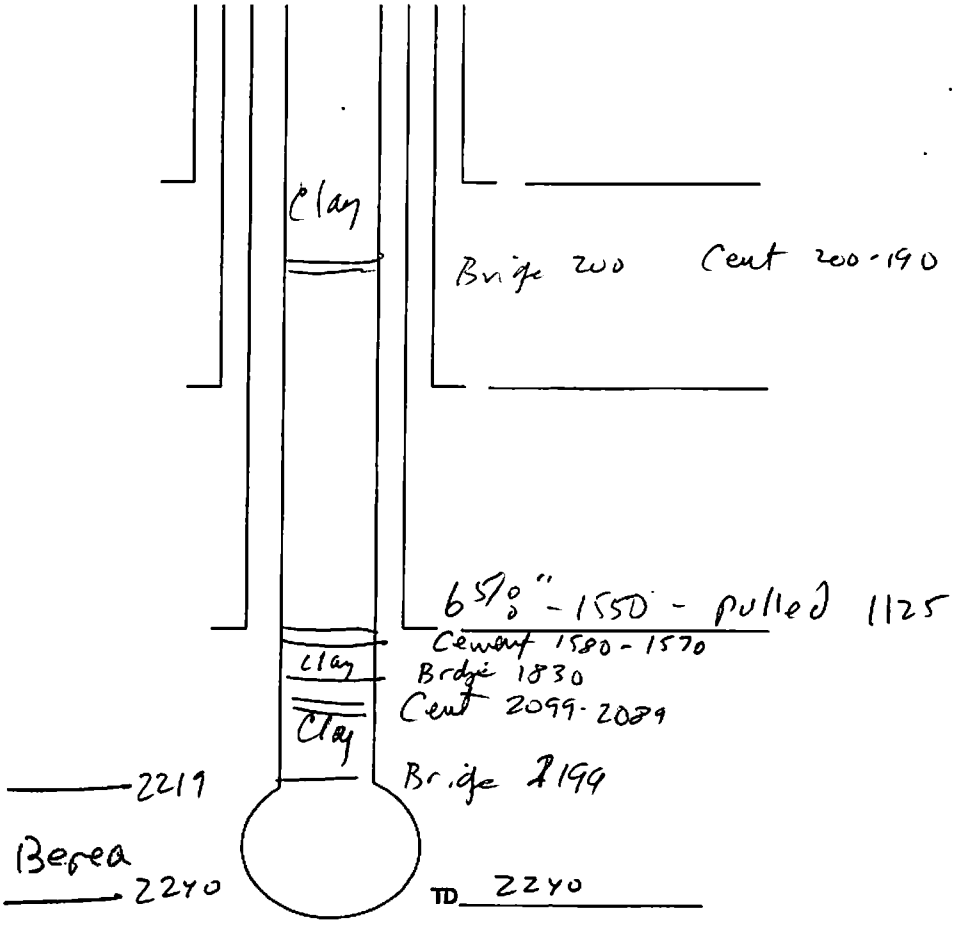
My commission expires:
Feb 21 1949

Permit No. Lin-464

R L Huffman 4

Griffithsville Unit #2 Field

47-043- 3046 4



From Drillers Records/Plugging Records

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WVDEP OOG Internal Use Only
Rev. 6/14/16

AOR - Well Review Checklist

API Number: 47- 043 - 30722 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 5
Farm Name: R L Huffman
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☐ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2476
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 416,750 Northing: 4,233,304
Elevation: 283
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47.043 - 30722

RECORD of Well No. 5 on R. R. Hug Jr. Farm Acres

Field, District County

Rig Commenced 19, Completed 19

Drilling Commenced Dec 26 1912, Completed Feb 24 1913

Cost per foot, 1.15 Contractor, Hinchey & Herman Dallas Address, Fairchild, W. Va.

Drillers' Names W. E. Williamson & J. L. McElwee

CONDUCTOR AND CASING USED IN DRILLING

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7¼ Inch	6¼ Inch	6¼ Inch	5¼ Inch	5 3-16-Inch	4¼ Inch
15						1765				

CONDUCTOR AND CASING LEFT IN WELL

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7¼ Inch	6¼ Inch	6¼ Inch	5¼ Inch	5 3-16 Inch	4¼ Inch
15						1765				

OIL WELL / GAS WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods		Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure
2/25/13	60 qts.									

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Conductor		15	15	El = 963.7
Red Rock	15	75	60	
Slate	75	140	65	
Sand	140	220	80	
Slate	220	340	120	
Sand	340	415	75	
Coal	415	420	5	
Slate	420	430	10	
Sand	430	580	150	420' - 10" hole
Slate	580	600	20	
Sand	600	740	140	
Slate	740	800	60	
Sand	800	860	60	
Slate & Shells	860	1050	190	
Salt Sand	1050	1720	670	Hole full of water at 1100'
Slate	1720	1725	5	
Little Lime	1725	1757	32	
Pencil Cave	1757	1760	3	
Big Lime	1760	1940	180	
Big Injun	1940	2000	60	Shot 8/31/26 - 80 qts
Slate	2000	2060	60	
Keener Shells	2060	2140	80	
Slate	2140	2360	220	
Keener Shells	2360	2380	20	
Slate	2380	2435	55	
Brown Shale	2435	2455	20	
Berea Sand	2455	2476	21	

47-043-30722

FORM OG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE. ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

LEASE OR PROPERTY OWNER

ADDRESS

G,S & H Supply Company
NAME OF WELL OPERATOR

P.O. Box 895 Sulan, Oklahoma.
COMPLETE ADDRESS

May 32 1942
WELL AND LOCATION

Duval District

Lincoln County

Well No. 5

Huffman Farm

STATE INSPECTOR SUPERVISING PLUGGING Dana E Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of } ss:

Hyatt Chapman and Joe Ward,

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 G,S & H Supply Company, well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 3 day of May, 1942, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD	FILLING MATERIAL			PLUGS USED	CASING	
FORMATION	CONTENT	FROM	TO	SIZE & KIND	CSG PULLED	CSG LEFT IN
	cement & rock	2405	2390	Per. Bridge		
	red clay	2390	2325			
	cement & rock	2325	2310	" "		
	cement & rock	2000	1885	" "		
	red clay	1885	1800			
	cement & rock	1800	1790	" "		
	cement & rock	1200	1190	" "		
	red clay	1190	1030			
	cement & rock	1030	1020	" "		
	cement & rock	250	240	" "		
	red clay	240	00			
					5½"-1904'	none
					7"-1784'	none

COAL SEAMS	DESCRIPTION OF MONUMENT
(NAME)	Cement Block
(NAME)	G,S & H.
(NAME)	Huffman #5
(NAME)	5-12-19.

and that the work of plugging and filling said well was completed on the 12 day of May, 1942.

And further deponents saith not.

Hyatt Chapman
J. E. Ward

Sworn to and subscribed before me this 16 day of May, 1942.

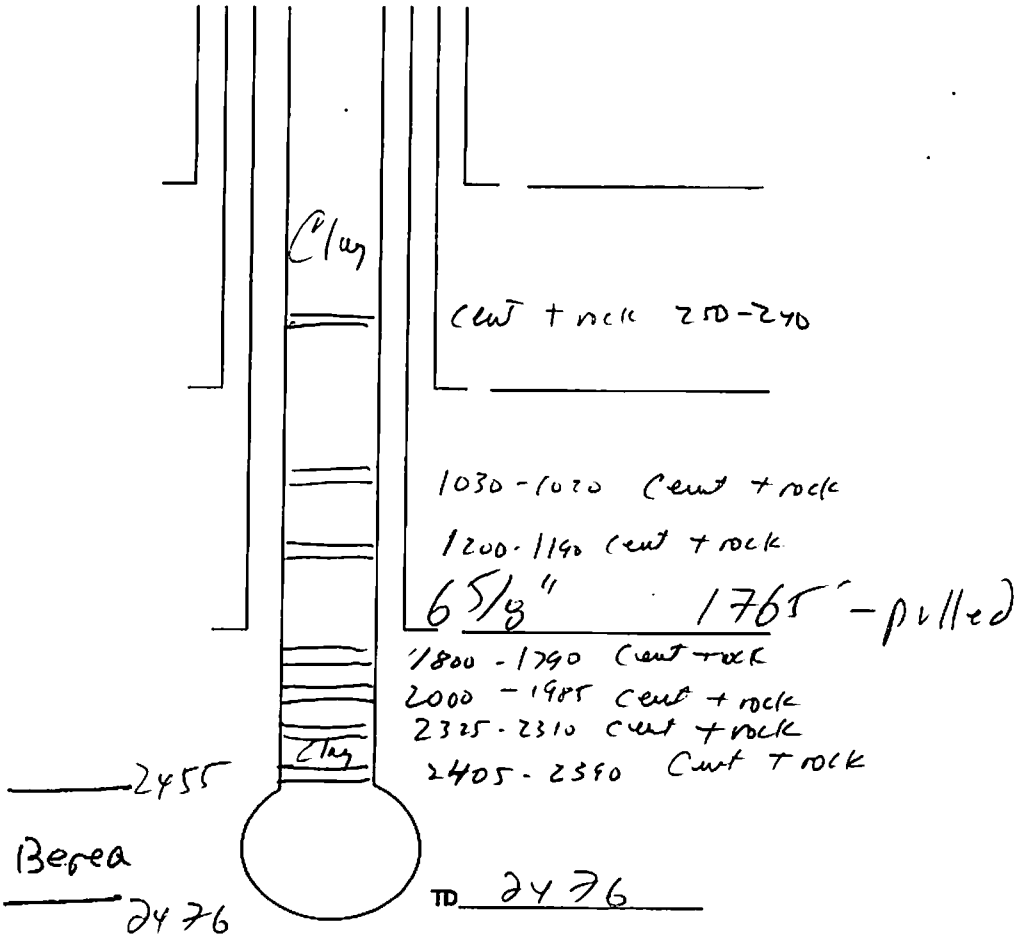
J R Carbonne
Notary Public.

My commission expires:
Oct-9-1947

Permit No. [illegible]722

Griffithsville Unit #2 Field

47-043- 3022



5 1/2" Csng

pulled 1904'

From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

(184)

AOR - Well Review Checklist

API Number: 47- 02126 Area Permit Number: 2R AP
Operator Name: H6E
Operator's Well #: 6
Farm Name: L Hoffman
Field Name: Griffithsville - Unit 2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☐ Producer (NonWaterflood) ☒ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☒ Plugged ☐
TD of well: 2436
Completion Zones: Berea Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 417,022 Northing: 4,233,336
Elevation: 286
Inside Field Boundary? ☐ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☐

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

TA.

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-02126

Case No. 7122 Acres 83 Farm Name R. L. Huffman Well No. (6)

Map 125-W 1 Mi. N.E. from Vere Waters of Beaver Fork of Straight Fork of Middle Fork of Mud River

N.) S. 81 E. W. 76

Civil District Duval

County Lincoln

State W. Va.

GAS OIL Rights Owned By

Location Made

Rig Completed

Dr'g Commenced Mar. 8, 1913

Dr'g Completed April 29, 1913

Dr'g Contractor Yawkey-Freeman Drlg Co.

Purchased From Big Creek

Date Purchased

Sold To

Gas $ per ft. 1-15/100

Date Abandoned

FORMATION

Kind	Top	Bottom	Steel Line Measurement	Tests
alt Sand	1025	1695		
ittle Lime	1700	1730		
encil Cave	1730	1735		
ig Lime	1735	1920		
ig Injun	1920	1980		
rown Shale	2395	2416		
erea	2416	2436		

CASING RECORD

Size	Bottom Casing (Steel Line)	Put In Well (Tally Meas.)	Pulled (Tally Meas.)	Cemented
Cond.		12'		Date
6-5/8		1740		Size Csg.
5-3/16		1771	S.L. 12-24-30	Top
				Bot. "

PACKERS AND SHOES

Kind	Size	Depth Set	Date Set
	5-3/16 x 6-5/8		

TORPEDO RECORD

Date	No. Qts.	Size Shell	Top Shot	Bottom	Results
4-30-1913	80		2418	2434	

DRILLING DEEPER

Commenced	Completed	Original Depth	Final Depth	Contractor

ABANDONMENT RECORD

Filled With	From	To	PLUG Size	PLUG Kind	PLUG Depth

Initial Prod.	Sand	★ At Completion	★ 30 Days After	★
Oil	Berea	20 Brls.		
Gas				

Oil in Barrels

APPROVED

Sur

SEE TESTS, REPORTS AND REMARKS ON REVERSE SID

R. L. Huffman #6 47-043-02126

REPAIRS TO WELL

Commenced	Completed	DRILLED DEEPER From	DRILLED DEEPER To	Shot (No. Quarts)	TESTS BEFORE Oil	TESTS BEFORE Gas	TESTS AFTER Oil	TESTS AFTER Gas	ROCK PRESSURE Before	ROCK PRESSURE After	Remarks

VOLUME AND PRESSURE TESTS

Date	Reading	Liquid	Opening	Tubing or Casing	Line Pressure	MINUTES 1	2	3	4	5	10	30	60	Rock Pressure	Time (Hours)	Volume	Sand

PRODUCTION

Year	Barrels	Year	Barrels

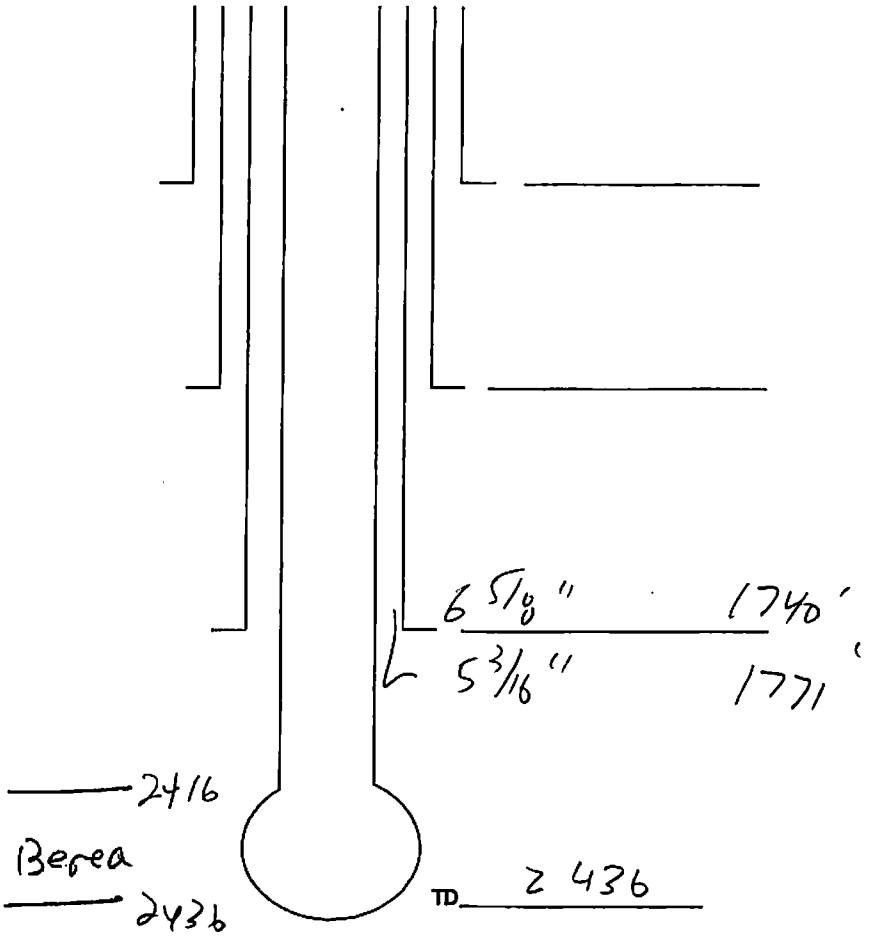
REMARKS

380' 10" hole. May 1, 1917 18# sledge in 10" hole outsinde of 6-5/8 casing dropped by roustabouts 2-21-1917 top liner 2055½ bottom of liner 2414 Jan. 1917 1-4½" bit 5' long left in bottom of sand casing record shows 359' of 5-3/16 casing which mus have been pulled out when string of 5-3/16 casing w run

R L Huffman B

Griffithsville Unit #2 Field

47-043- 02126



From Drillers Records/Plugging Records

185

WVDEP OOG Internal Use Only
Rev. 6/14/16

AOR - Well Review Checklist

API Number: 47- 043 - 31269 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 7
Farm Name: R L Huffman
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒E Producer (NonWaterflood) ☒ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2395
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 416,907 Northing: 4,233,516
Elevation: 270'
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-31269

RECORD of Well No. 7 on R. L. Hughes Farm Acres

Field, District County

Rig Commenced 10 Completed 19

Drilling Commenced Nov 20 1913 Completed June 4 1914

Cost per foot, 1 1/2 Contractor Hanley & Thomas Bro Address Fairchance Pa.

Drillers' Names E. L. Hickman & W. W. Hughes.

CONDUCTOR AND CASING USED IN DRILLING

Conductor	13 Inch	10 Inch	8 1/4 Inch	8 Inch	7 1/4 Inch	6 5/8 Inch	6 1/4 Inch	5 1/4 Inch	5 3-16 Inch	4 1/4 Inch
14						1685				

CONDUCTOR AND CASING LEFT IN WELL

Conductor	13 Inch	10 Inch	8 1/4 Inch	8 Inch	7 1/4 Inch	6 5/8 Inch	6 1/4 Inch	5 1/4 Inch	5 3-16 Inch	4 1/4 Inch
14						1685'				

OIL WELL — GAS WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods		Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure
1/12/14	80 qts.									

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Conductors		14	14	5 1/2 - 8"
Slate	14	100	86	
Sand	100	150	50	
Slate	150	250	100	
Sand	250	350	100	
Slate	350	400	50	350' 10" hole
Sand	400	490	90	
Slate	490	670	180	
Sand Shells	670	970	300	
Light Sand	970	1625	655	
Lime	1625	1635	10	
Little Lime	1635	1670	35	
Pencil Cave	1670	1675	5	1685 hole full of water at 1675
Big Lime	1675	1855	180	
Big Injun	1855	1915	60	
Slate	1915	1985	70	
Lower Shells	1985	2110	125	
Slate	2110	2355	245	
Gunn Shale	2355	2375	20	
Berea Sand	2375	2395	20	

47-043 - 31269

FORM OG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

LEASE OR PROPERTY OWNER

ADDRESS

Pack & Jackson
NAME OF WELL OPERATOR

Hamlin, W. Va.
COMPLETE ADDRESS

November 4, 19 59
WELL AND LOCATION

Duval District

Lincoln County

Well No. 7

R. L. Huffman Farm

STATE INSPECTOR SUPERVISING PLUGGING G. H. Samples - Charleston, W. Va. - Ph. DI 3-6524

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

Jerry Stephens and Roger Wells 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 Pack & Jackson well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 11 day of January, 1960, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD	FILLING MATERIAL	CASING	
FORMATION	Set permanent bridge at 2357'	SIZE & KIND	CSG PULLED / CSG LEFT IN
	Cement 2357' to 2347'	2" Tubing	2389' / None
	Crushed Stone 2347' to 2342'		
	Clay 2342' to 2292'		
	Set permanent bridge at 1945'		
	Cement 1945' to 1935'		
	Crushed stone 1935' to 1930'		
	Mud & Clay 1930' to 950'		
	Cement 950' to 940'		
	Crushed stone 940' to 935'	6-5/8" Casing	1685' / None
	Set permanent bridge at 500'		
	Cement 500' to 490'		
	Crushed Stone 490' to 485'		
	Mud & Clay 485' to 3'		
	Cement 3' to surface.		
	Erected monument as prescribed by law.		
COAL SEAMS		DESCRIPTION OF MONUMENT	
(NAME)		30" above surface with inscription	
(NAME)		"Pack & Jackson - Well #7 - abandoned	
(NAME)		January 21, 1960."	
(NAME)			

and that the work of plugging and filling said well was completed on the 21 day of January, 1960.

And further deponents saith not.

Jerry Stephens
Roger Wells

Sworn to and subscribed before me this 22 day of January, 1960.

My commission expires 4-12-64

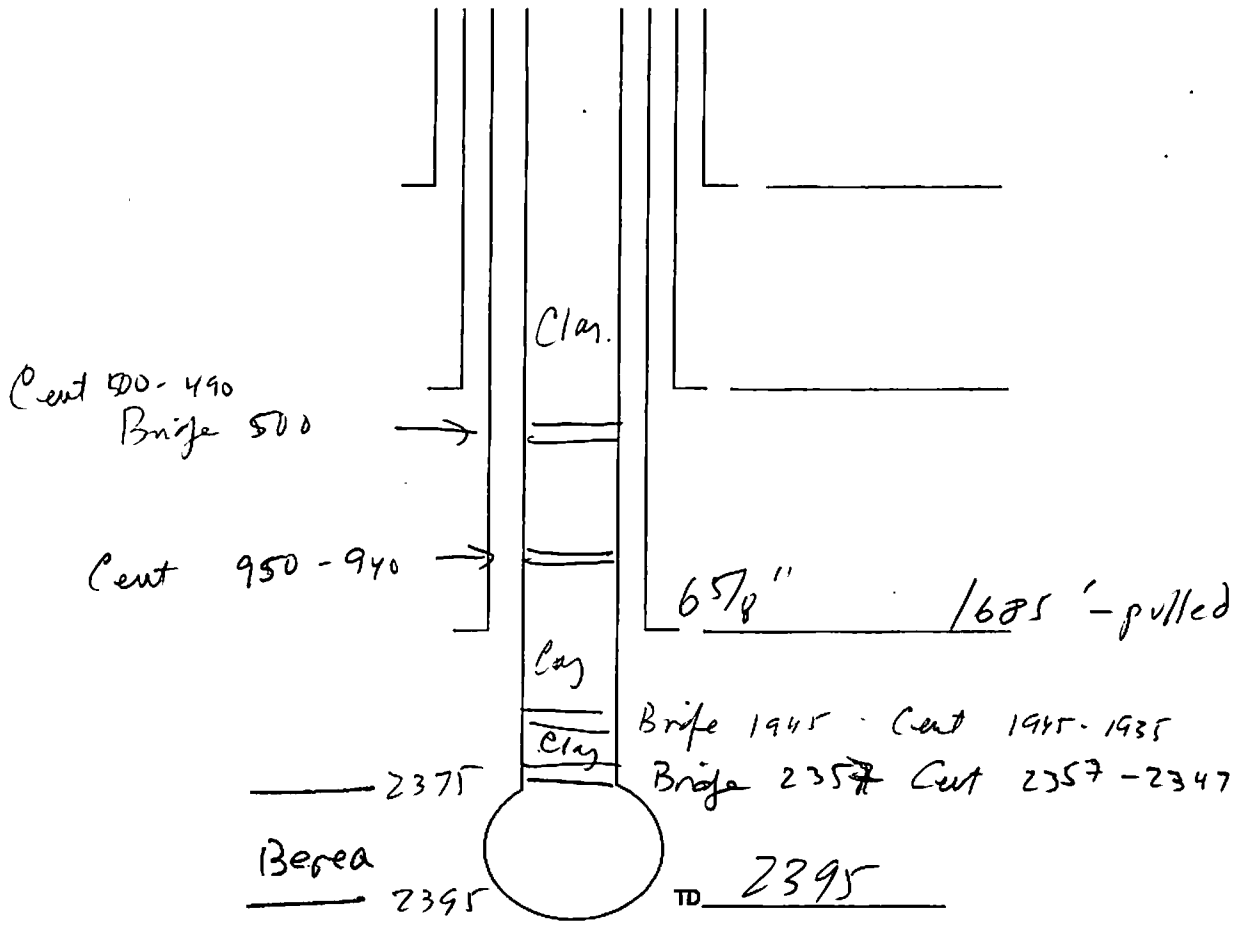
Notary Public.
Permit No. LIN-1269

RECEIVED JAN 1960 WEST VIRGINIA DEPT. OF MINES

RL Huffman 7

Griffithsville Unit #2 Field

47-043-31269



From Drillers Records/Plugging Records

186

WVDEP OOG Internal Use Only
Rev. 6/14/16

AOR - Well Review Checklist

API Number: 47- 043 - 30742 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 8
Farm Name: R L Huffman
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2483
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 417,218 Northing: 4,233,587
Elevation: 298
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:
Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-30742

RECORD of Well No. 8 on R. L. Huffman Farm ..... Acres

..... Field, ... District ..... County

Rig Commenced ..... 19....., Completed ..... 19....

Drilling Commenced July 29 1913, Completed Sept 17 1913

Cost per foot, 11½ Contractor Hawley & Freeman Dist C Address, Hawley W Va

Drillers' Names E. L. Stevenson & W. D. Medstead

CONDUCTOR AND CASING USED IN DRILLING

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7¾ Inch	6¼ Inch	6¼ Inch	5¼ Inch	5 3-16 Inch	4¼ Inch
14						1790				

CONDUCTOR AND CASING LEFT IN WELL

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7¾ Inch	6¼ Inch	6¼ Inch	5¼ Inch	5 3-16 Inch	4¼ Inch
14						1790				

OIL WELL — GAS WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods		Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure
9/19/13	80 qts.									

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Conductor		14	14	Elev.
Red Rock	14	50	36	
Slate	50	100	50	
Sand	100	150	50	300' of 10" hole.
Slate & Shells	150	250	100	
Sand	250	300	50	
Slate	300	400	100	
Sand & Slate	400	850	450	
Slate	850	1020	170	
Salt Sand	1020	1730	710	
Slate	1730	1745	15	
Little Lime	1745	1780	35	Hole full of water 1170'
Pencil Cave	1780	1785	5	
Big Lime	1785	1970	185	
Big Injun	1970	2035	65	
Slate	2035	2095	60	
Injun Shells	2095	2180	85	
Slate	2180	2400	220	Shot 10/29/26-40 qts.
Lime Shell	2400	2440	40	
Brown Shale	2440	2463	23	
Berea Sand	2463	2483	20	

47.043 - 3074 2

FORM OG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

LEASE OR PROPERTY OWNER

ADDRESS

United Fuel Gas Company
NAME OF WELL OPERATOR

Charleston, W. Va.
COMPLETE ADDRESS

July 12 1949
WELL AND LOCATION

Duval District

Lincoln County

Well No. 8

R. L. Huffman Farm

STATE INSPECTOR SUPERVISING PLUGGING D. E. Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

Clyde Satterfield and E. J. Elkins, Jr.
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 R. H. Adkins, well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 5 day of May, 1949, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD		FILLING MATERIAL		PLUGS USED	CASING	
FORMATION	CONTENT	FROM	TO	SIZE & KIND	CSG PULLED	CSG LEFT IN
SET A PERMANENT BRIDGE AT 2340' - 23' above Berea Sand. 2 sacks neat cement and 5' crushed stone on bridge. Filled with clay to 2340'. Neat cement 2340' to 2330'. PULLED 5-3/16" Casing.						
SET A PERMANENT BRIDGE AT 2-35' - bottom of Big Injun. 2 sacks neat cement and 5' crushed stone on bridge. Filled with clay to 1820' - 30' below 6-5/8" casing. Neat cement 1820' - 1810'. 5' crushed stone on cement plug, sealing hole completely below 6-5/8" casing.						
PULLED 6-5/8" CASING AS BALANCE OF HOLE WAS FILLED AND PLUGGED. Continued filling with clay to 1725' - 20' above Little Lime - 10' neat cement. SET A PERMANENT BRIDGE AT 1330' - a point in the Salt Sands. 2 sacks neat cement and 5' crushed stone on bridge. Filled with clay to 1000' - [illegible] 20' above Salt Sands. Neat Cement 1000' - 990'						
SET A PERMANENT BRIDGE AT 250', 2 sacks neat cement and 5' crushed stone on bridge. Filled with clay to surface.						
Erected marker such as is described in Rule 18, 1931 Regulations						

COAL SEAMS	
(NAME)	
(NAME)	
(NAME)	
(NAME)	

DESCRIPTION OF MONUMENT

U. F. GAS CO.
R. L. Huffman # 8
Date of Abandonment

and that the work of plugging and filling said well was completed on the 3 day of June, 1949.

And further deponents saith not.

E. J. Elkins, Jr.
Clyde Satterfield

Sworn to and subscribed before me this 16 day of July, 1949.

[illegible]
Notary Public.

My commission expires:
Apr 1, 1957

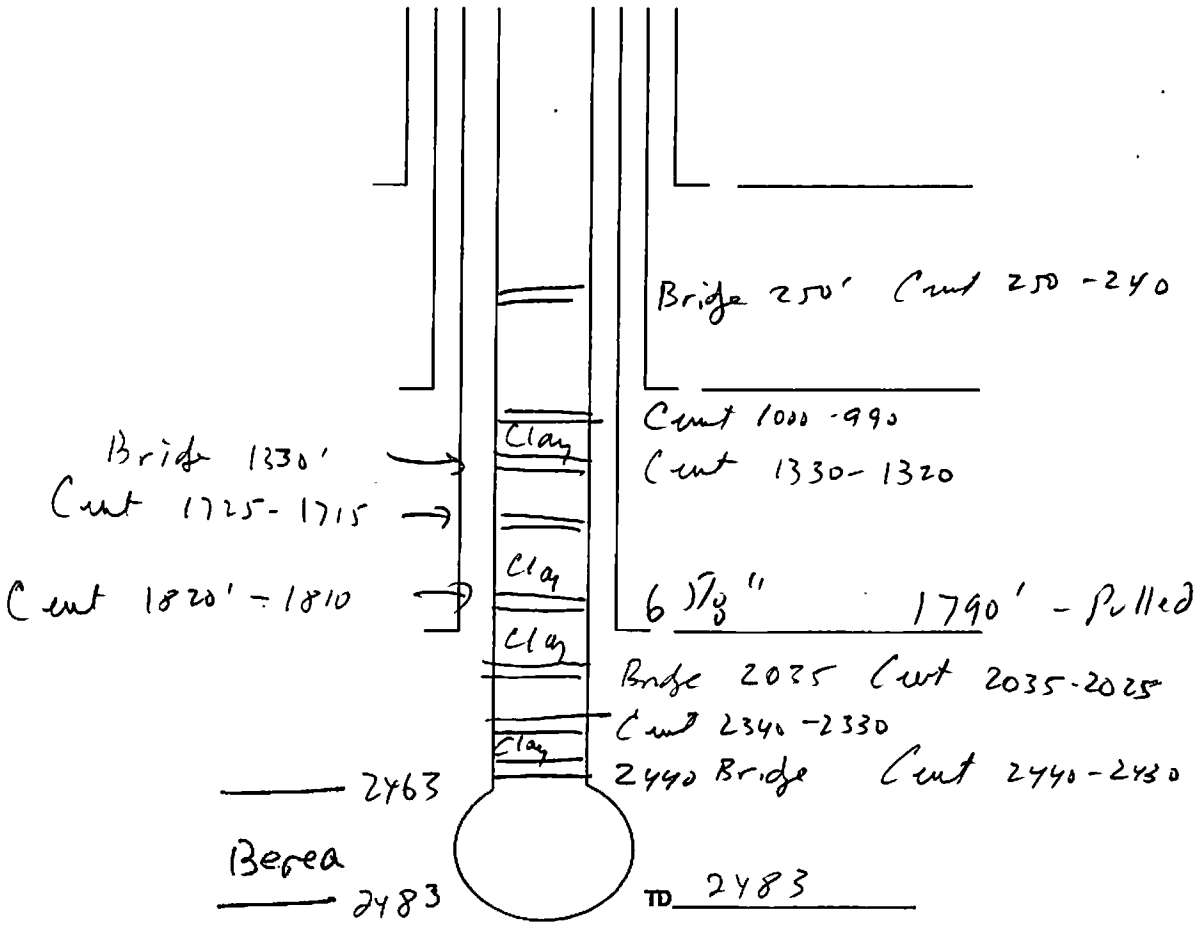
Permit No. Lin-742

127

RL Huffman &

Griffithsville Unit #2 Field

47-043- 30742



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

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AOR - Well Review Checklist

API Number: 47- 043 - 30744 Area Permit Number: 2R AP

Operator Name: H 6 Energy

Operator's Well #: 9

Farm Name: R L Huffman

Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐

Well Status: Active ☐ Abandoned ☐ Plugged ☒

TD of well: 2437

Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐

Easting: 417,069 Northing: 4,233,530

Elevation: 282

Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐	
Date of Last MIT:	Passed?	No ☐	Yes ☐	
Open Hole Completion		No ☐	Yes ☒	
Well penetrates injection zone?		No ☐	Yes ☒	
Well perforated in injection zone?		No ☒	Yes ☐	
Cemented across injection zone?		No ☒	Yes ☐	
Packer immediately above injection zone (<100')?		No ☐	Yes ☐	No Packer ☐
		If No: Provide Depth:		
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒	

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**

Bottom Hole Injection Pressure **0**

Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:

Date Reviewed:

** Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

47-043-30744

WELL RECORD

Oil or Gas Well (KIND)

Permit No.

Company: United Fuel Gas Company
Address: P. O. Box 1273 - Charleston, W. Va.
Farm: R. L. Huffman Acres
Location (waters):
Well No.: 9 Elev.
District: Duval County: Lincoln
The surface of tract is owned in fee by
Address
Mineral rights are owned by
Address
Drilling commenced
Drilling completed: April 23, 1914
Date Shot From To
With
Open Flow /10ths Water in Inch
/10ths Merc. in Inch
Volume Cu. Ft.
Rock Pressure lbs. hrs.
Oil bbls., 1st 24 hrs.
Fresh water feet feet
Salt water feet feet

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Packer: Hook Wall
16			
13- 14" Cond.	14	14	Size of 5-3/16" x 6-5/8" - 1804'
10			
8¼			
6⅝	1745	1745	Depth set
5 3/16	1804	1804	
3			Perf. top
2	2431	2431	Perf. bottom
Liners Used			Perf. top
			Perf. bottom

CASING CEMENTED SIZE No. Ft. Date

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

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks
Salt Sand			1065	1693			
Little Lime			1693	1730			
Pencil Cave			1730	1734			
Big Lime			1734	1910			
Big Injun			1910	1975			
Brown Shale			2392	2417			
Berea			2417	2437			

MAY 1949 WEST VIRGINIA DEPARTMENT OF MINES

47.043 - 30744

FORM OG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

LEASE OR PROPERTY OWNER

ADDRESS

United Fuel Gas Company
NAME OF WELL OPERATOR
Charleston, W. Va.
COMPLETE ADDRESS
July 12 19 49
WELL AND LOCATION
Duval District
Lincoln County
Well No. 9
R. L. Huffman Farm

STATE INSPECTOR SUPERVISING PLUGGING D. E. Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

Clyde Satterfield and E. J. Elkins, Jr.
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 R. H. Adkins, well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 4 day of June, 19 49, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD	FILLING MATERIAL			PLUGS USED	CASING	
FORMATION	CONTENT	FROM	TO	SIZE & KIND	CSG PULLED	CSG LEFT IN

PULLED 2" Tubing
SET A PERMANENT BRIDGE AT 2397' - 20' above Berea sand. 2 sacks neat cement and 5' crushed stone on bridge. Filled with clay to 2297' Neat cement 2297' to 2287'.
PULLED 5-3/16" CASING
SET A PERMANENT BRIDGE AT 1975' - bottom of Big Injun. 2 sacks neat cement and 5' crushed stone on bridge. Filled with clay to 1775' - 20' below 6-5/8" casing neat cement 1775' - 1765'. 5' crushed stone on cement plug.
PULLED 6-5/8" CASING AS BALANCE OF HOLE WAS FILLED AND PLUGGED. Continued filling with clay to 1693' - top of Liggle Lime Neat cement 1693' - 1683'.
SET A PERMANENT BRIDGE AT 1250' - apoint in the Salt Sands. 2 sacks neat cement and 5' crushed stone on bridge. Filled with clay to 1045' - 20' above Salt Sands. neat cement 1045' - 1035'.
SET A PERMANENT BRIDGE AT 350'. 2 sacks neat cement and 5' crushed stone on bridge. Filled with clay to surface. Erected a marker such as is described in Rule 18, 1931 Regulations.

COAL SEAMS	DESCRIPTION OF MONUMENT
(NAME)	U. F. GAS CO.
(NAME)	R. L. Huffman # 9
(NAME)	Date of Abandonment
(NAME)	

and that the work of plugging and filling said well was completed on the 11 day of June, 19 49.

And further deponents saith not.

Clyde Satterfield
E. J. Elkins Jr.

Sworn to and subscribed before me this 16 day of July, 19 49.

L. S. Bragg
Notary Public.

My commission expires:
Apr. 1, 1957

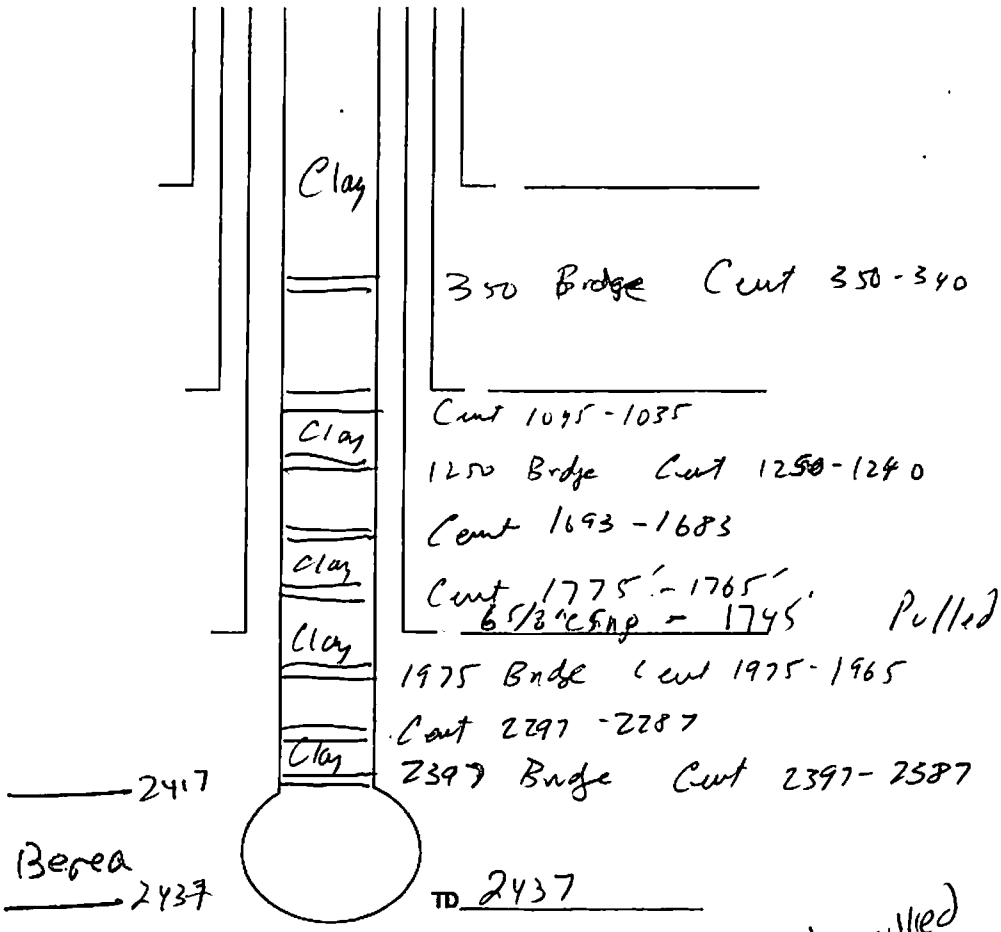
Permit No. Lin-744

128

D L Huffman S

Griffithsville Unit #2 Field

47-043- 30744



P 5 3/16" Csng (1804') pulled

From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

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AOR - Well Review Checklist

API Number: 47- 043 - 30971 Area Permit Number: 2R AP

Operator Name: H 6 Energy

Operator's Well #: #1

Farm Name: WS Hoffins

Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐

Well Status: Active ☐ Abandoned ☐ Plugged ☒

TD of well: 2611

Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐

Easting: 418,144 Northing: 4,232,281

Elevation: 340

Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = 0

Bottom Hole Injection Pressure 0

Hydrostatic Pressure 0

Comments:

Reviewer Name: Signature:

Date Reviewed:

** Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-30971

RECORD of Well No. 1 on W. S. Bailey Farm Acres

Field, District County, ✓

Rig Commenced 19, Completed 19

Drilling Commenced Sept 2 1910, Completed Oct 28 1910

Cost per foot, 12½ Contractor Sankey & Freeman, Drlg. Address Glenville, W. Va.

Drillers' Names, Allen Shaw & Joe Sheppard.

CONDUCTOR AND CASING USED IN DRILLING

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7¼ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 3/16 Inch	4¾ Inch
16						1950				

CONDUCTOR AND CASING LEFT IN WELL.

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7¼ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 3/16 Inch	4¾ Inch
16						1950				

OIL WELL — **GAS WELL**

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods		Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure
10/21/10	90 x 8	2nd Shot 4/10 M		120 x 8						

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Soft & Gray		16	16	Fill = 1121.5
Sand	16	21	5	
Red Rock	21	61	40	
Sand	61	81	20	
Slate	81	191	110	
Sand	191	271	80	
Slate	271	396	125	
Sand	396	436	40	
Slate & Sand	436	1120	684	
Lime	1120	1160	40	Show gas & water @ 1260
Slate & Sand	1160	1840	680	
Slate	1840	1850	10	
Little Lime	1850	1915	65	
Pencil Cave	1915	1920	5	
Big Lime	1920	2100	180	
Big Injun	2100	2170	70	
Sand	2170	2240	70	
Slate & Sand	2240	2300	60	
Slate	2300	2380	80	
Lower Maxton	2380	2410	30	
Slate	2410	2460	50	
Lower Wells	2460	2490	30	
Slate	2490	2590	100	
Pencil Cave	2590	2595	5	
Rock & Sand	2595	2616	21	

47-043 - 30971

FORM OG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

LEASE OR PROPERTY OWNER

ADDRESS

Bradford Supply Company
NAME OF WELL OPERATOR
Bradford, Pennsylvania
COMPLETE ADDRESS
April 27 19 51
WELL AND LOCATION
Duval District
Lincoln County
Well. No. 1
W. S. Keeling Farm

STATE INSPECTOR SUPERVISING PLUGGING D. E. Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

George Adkins and Lidie James Adkins 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 Hal Pack; well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 23 day of March, 19 51, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD	FILLING MATERIAL			PLUGS USED	CASING	
FORMATION	CONTENT	FROM	TO	SIZE & KIND	CSG PULLED	CSG LEFT IN
	Bridge Set At	2570'		2553' - 2"	Tubing	None
	Clay		2400'	472' - 7"		None
	Cement	2400'	2390'			
	Crushed Stone	5'				
	Bridge Set At	2200'				
	Clay		1975'			
	Cement	1975'	1900'			
	Crushed Stone	5'				
	Bridge Set At	1500'				
	Clay		1140'			
	Bridge Set At	300'				
	Cement	300'	290'			
	Clay to Surface					
COAL SEAMS				DESCRIPTION OF MONUMENT		
(NAME)				Erected Marker According Rule 18, 1931 Regulations		
(NAME)						
(NAME)						
(NAME)						



and that the work of plugging and filling said well was completed on the 17 day of April, 19 51.

And further deponents saith not.

George Adkins
Lidie James Adkins

Sworn to and subscribed before me this 30 day of April, 19 51.

Notary Public.

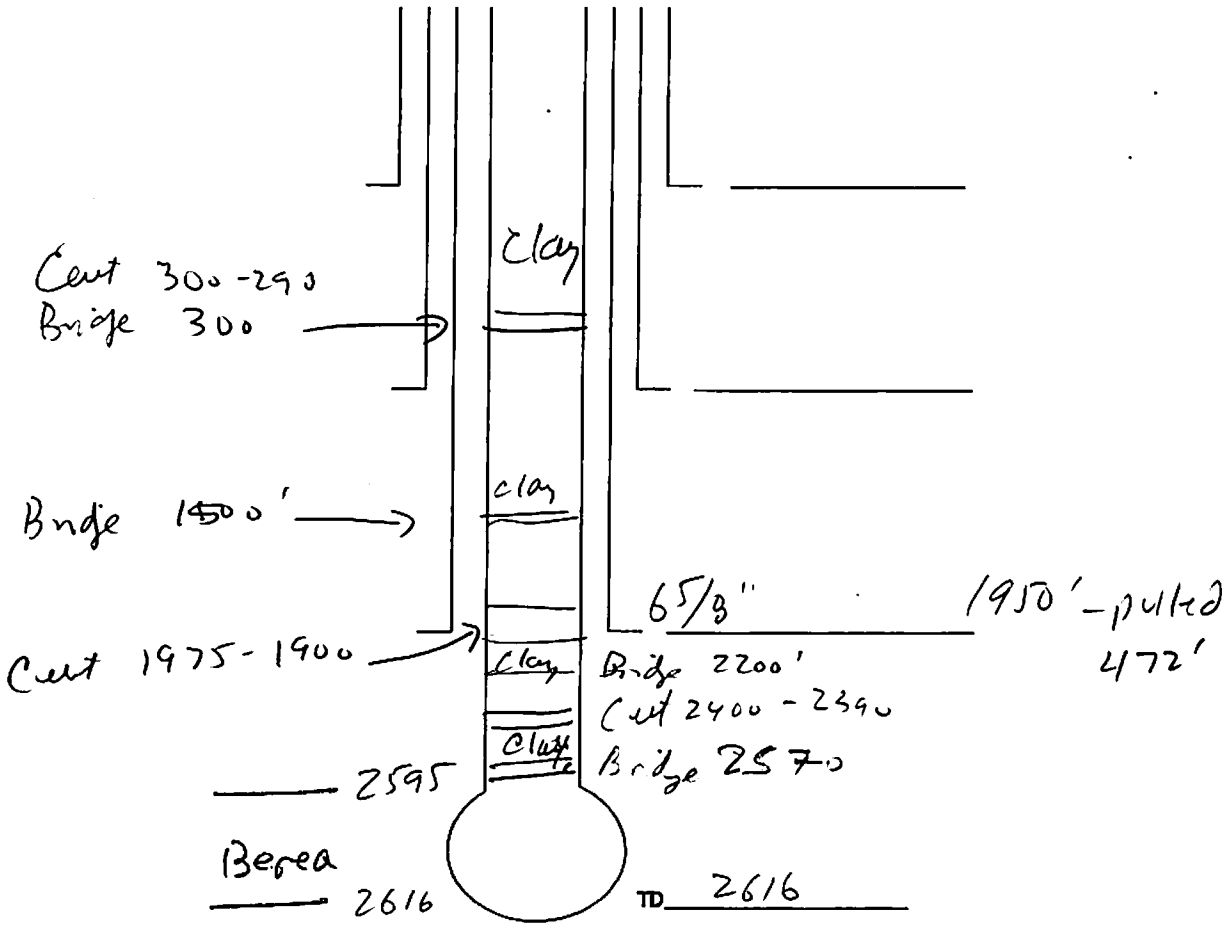
My commission expires:
My Commission Expires March 10, 1952

Permit No. LIN-971

W S Keely 1

Griffithsville Unit #2 Field

47-043- 30971



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

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AOR - Well Review Checklist

API Number: 47- 043 - 31034 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 2
Farm Name: WS Keeling
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2587
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 417,963 Northing: 4,232,275
Elevation: 333'
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	,
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = 0
Bottom Hole Injection Pressure 0
Hydrostatic Pressure 0

Comments:

Reviewer Name: _____ Signature: _____
Date Reviewed: _____

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-31034

RECORD of Well No. 2 on W. J. Keeling Farm Acres
Field, District County
Drilling Commenced 19 , Completed 19
Drilling Commenced March 1 1913, Completed May 16 1913
Cost per foot, 1.15 Contractor, Hartley & Truman Drl. Address, Glenville, W. Va.
Drillers' Names G. C. Rowland & W. D. Rogers

CONDUCTOR AND CASING USED IN DRILLING

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7¼ Inch	6¼ Inch	6¼ Inch	5¼ Inch	5 3-16-Inch	4¼ Inch
14						1895				

CONDUCTOR AND CASING LEFT IN WELL

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7¼ Inch	6¼ Inch	6¼ Inch	5¼ Inch	5 3-16 Inch	4¼ Inch
14						1895'				

OIL WELL / GAS WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods		Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure
5/19/13	80 qts.									

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Conductor		14	14	El = 1094.34
Red Rock	14	75	61	
Slate	75	135	60	
Red Rock	135	260	125	
Sand	260	300	40	
Red Rock	300	435	135	
Slate	435	505	70	545' of 10" hole
Sand	505	565	60	
Coal	565	569	4	
Sand	569	630	61	
Slate	630	760	130	
Sand	760	885	125	
Slate	885	950	65	Hole full of water at 1225'
Sand	950	980	30	
Slate	980	1080	100	
Sand	1080	1120	40	
Slate	1120	1150	30	
Salt Sand	1150	1790	640	
Weston Sand	1790	1840	50	
Little Lime	1840	1877	37	
Pencil Cave	1877	1885	8	
Big Lime	1885	2080	195	
Big Injun	2080	2165	85	
Slate	2165	2205	40	Shot 3/25/18 - 90 qts. Berea Sand Bridged at 1000 ft.
Injun Sheels	2205	2290	85	
Slate	2290	2345	255	
Injun Shale	2345	2367	22	
Berea Sand	2367	2387	20	

47.043 - 31034

C C
O O
P P
Y

Form OG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

LEASE OR PROPERTY OWNER

ADDRESS

G. S. H. Supply Company
c/o Ed. Roceed OF WELL OPERATOR
Griffithsville, West Virginia
COMPLETE ADDRESS

September 3 19 51

WELL AND LOCATION

Duval District

Lincoln County

Well. No. 2

H. S. Keeling Farm

STATE INSPECTOR SUPERVISING PLUGGING Dale E. Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

and

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 G. S. H. Supply Company, well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 4 day of August, 19 51., and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD		FILLING MATERIAL			PLUGS USED	CASING	
FORMATION	CONTENT	FROM	TO		SIZE & KIND	CSG PULLED	CSG LEFT IN
	Bridge Set At	2547'			5¼"	1937	None
	Neat Cement	2547'	2597'		7"	1895	None
	Crushed Stone	50'			2"	2587	None
	Clay		2440'				
	Neat Cement	2440'	2430'				
	Bridge Set At	2165'					
	Neat Cement	2165'	2155'				
	Crushed Stone	50'					
	Fill w/clay		1925'				
	Neat Cement	1925'	1915'				
	Crushed Stone	50'					
	Bridge Set At	1350'					
	Neat Cement	1350'	1340'				
	Crushed Stone	50'					
	Clay		1190'				
COAL SEAMS	Neat Cement	1130'	1120'		DESCRIPTION OF MONUMENT		
(NAME)	Bridge Set At	350'			Erected Marker According		
(NAME)	Neat Cement	350'	340'		Rule 18, 1931 Regulations		
(NAME)	Crushed Stone	50'					
(NAME)	Clay to Surface						

and that the work of plugging and filling said well was completed on the 16 day of August, 1951

And further deponents saith not.

John McCallister
Ed. W. Cooper

Sworn to and subscribed before me this 4th day of December, 1951.

J R Dalton
Notary Public.

My commission expires Oct-9-1957

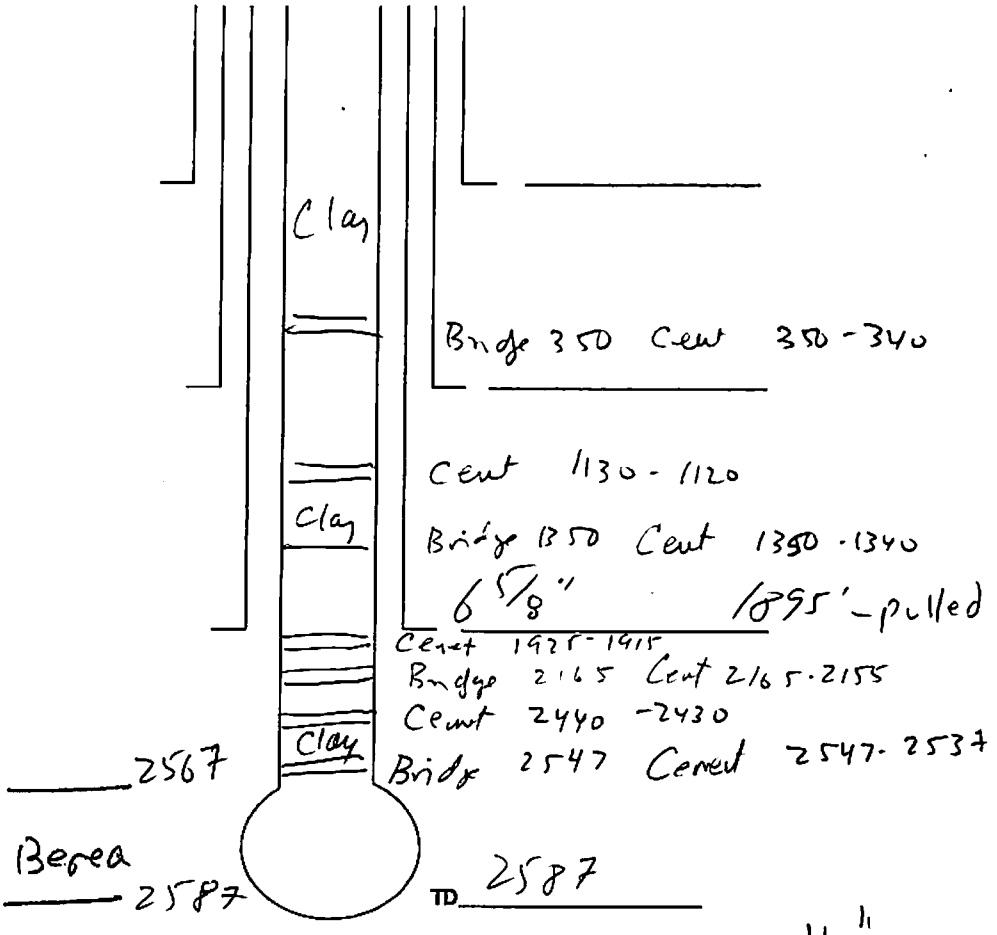
Permit No. LIN-1034

DEC 1951
WEST VIRGINIA
DEPARTMENT OF MINES

W S Kerlins 2

Griffithsville Unit #2 Field

47-043- 31034



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

(AO)

AOR - Well Review Checklist

API Number: 47- 043 - 30584 Area Permit Number: 2R AP
Operator Name: H 6 Energy
Operator's Well #: 3
Farm Name: WS Keeling
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2519
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 417,979 Northing: 4,232,636
Elevation: 313
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**
Bottom Hole Injection Pressure **0**
Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:
Date Reviewed:

** Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47.643 - 30584

RECORD of Well No. 3 on W. J. Keeling Farm ____ Acres ____

____ Field, ____ District ____ County ____

Rig Commenced ____ 19____, Completed ____ 19____

Drilling Commenced June 6 1914, Completed Aug 31 1914

Cost per foot, 1.50 Contractor Beare Drilling Co. Address, Yawkey W. Va.

Drillers' Names J. H. Hanes & G. E. Dresbach

CONDUCTOR AND CASING USED IN DRILLING

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅝ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 3-16-Inch	4½ Inch
16						1820				

CONDUCTOR AND CASING LEFT IN WELL

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅝ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 3-16 Inch	4½ Inch
16						1820				

OIL WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods
9/3/15	80 qts.			

GAS WELL

Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Soft		15	15	Reamed hole from
Slate	15	75	60	10" to 8" at 300'
Sand	75	150	75	
Slate	150	250	100	water to rise with at 200'
Sand	250	500	250	
Slate	500	510	10	
Sand	510	590	80	Hole full salt water
Slate	590	740	150	at 1190'
Sand	740	860	120	
Slate	860	950	90	El=1026.3
Sand	950	1050	100	
Slate	1050	1125	75	
Salt Sand	1125	1760	635	
Slate	1760	1775	15	
Black Lime	1775	1810	35	
Pencil Cave	1810	1815	5	
Big Lime	1815	1995	180	
Big Injun	1995	2075	80	
Slate	2075	2145	70	
Slate & shells	2145	2295	150	
Slate	2295	2478	183	
Brown shale	2478	2499	21	Completed to Brown shale
Berea Sand	2499	2519	20	July 20-1914.
				Shot - 11/25/16 - 40 qts

47-043 - 20584

FORM 66-B

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE. ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

South Penn Natural Gas Co.
LEASE OR PROPERTY OWNER

Parkersburg, W. Va.
ADDRESS

O. R. DeLay
NAME OF WELL OPERATOR

P. O. Box 49 Hamlin, W. Va.
COMPLETE ADDRESS

February 19 19 49
WELL AND LOCATION

Duval District

Lincoln County

Well No. 3

W. S. Keeling Farm

STATE INSPECTOR SUPERVISING PLUGGING D. E. Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

O. R. DeLay and Guadalupe Saenz
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 O. R. DeLay, well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 10th day of Feb, 1949, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD	FILLING MATERIAL			PLUGS USED	CASING	
FORMATION	CONTENT	FROM	TO	SIZE & KIND	CSG PULLED	CSG LEFT IN
	Permanent Bridge	2484	2479			
	Cement	2479	2469			
	Stone	2469	2464			
	Clay	2464	2350			
	Cement	2350	2340			
	Permanent Bridge	2105	2100			
	Cement	2100	2090			
	Stone	2090	2085			
	Clay	2085	1875			
	Pulled 5-3/16" casing loose and out as hole was filled					
	Clay	1875	1850		1869'	5-3/16"
	Cement	1850	1840			
	Stone	1840	1835			
	Pulled 6-5/8" casing loose and out as hole was filled				1820'	6-5/8"
	Permanent Bridge	1605	1600			
COAL SEAMS	Cement	1600	1590	DESCRIPTION OF MONUMENT		
	Stone	1590	1585	18" X 18" X 30" Concrete Block		
	Clay	1585	1105			
	Cement	1105	1095			
	con't on reverse side					

and that the work of plugging and filling said well was completed on the 16th day of Feb, 1949.

And further deponents saith not.

Guadalupe Saenz
O. R. DeLay

Sworn to and subscribed before me this 16th day of Feb, 1949.

James C. Cartwright
Notary Public.

My commission expires: July 1, 1958

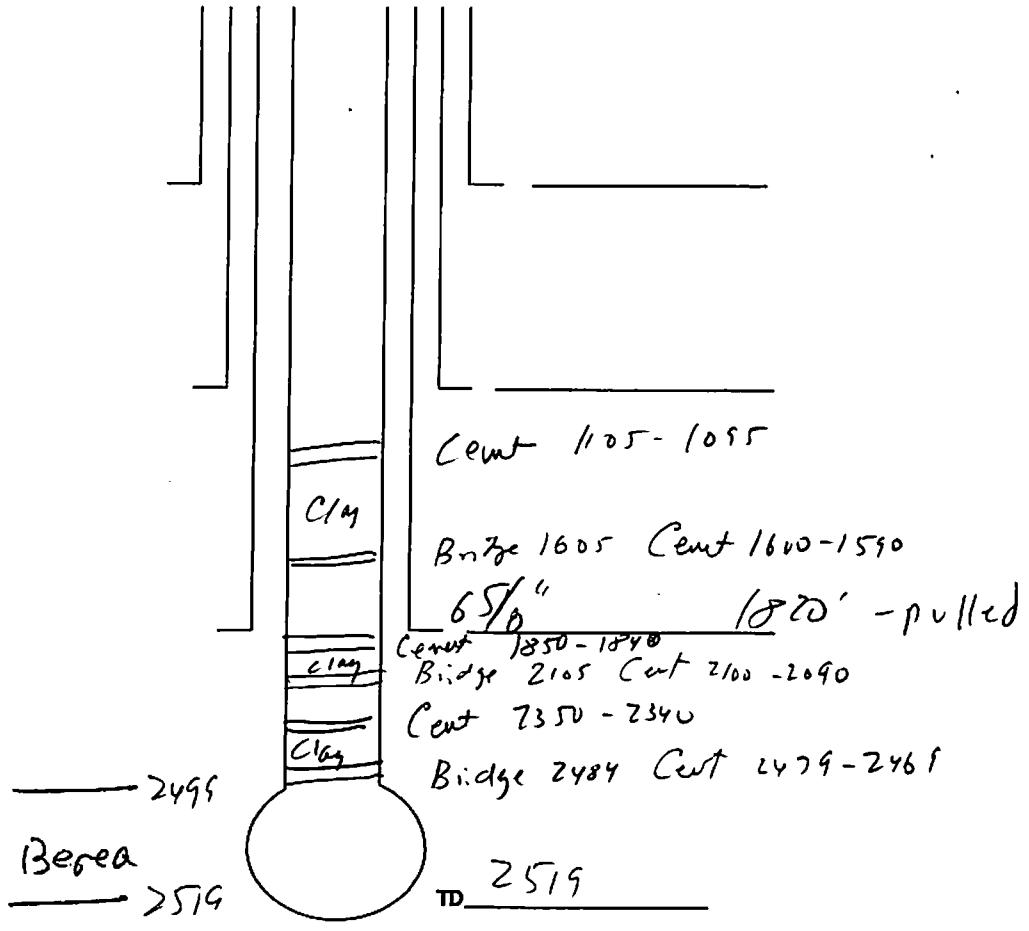
Permit No. L-5-F-4

FEB 1949
DEPARTMENT OF MINES

W Sterling 3

Griffithsville Unit #2 Field

47-043- 30584



5 3/16" CSNS

From Drillers Records/Plugging Records

Pulled 1869'

WVDEP OOG Internal Use Only
Rev. 6/14/16

191

AOR - Well Review Checklist

API Number: 47- 043 - 0 2131 Area Permit Number: 2R AP

Operator Name: H 6 Energy

Operator's Well #: 4

Farm Name: W S Keeling

Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐

Well Status: Active ☐ Abandoned ☐ Plugged ☒

TD of well: 2490

Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐

Easting: 417,952 Northing: 4,232,794

Elevation: 1307

Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐	
Date of Last MIT:	Passed?	No ☐	Yes ☐	
Open Hole Completion		No ☐	Yes ☒	
Well penetrates injection zone?		No ☐	Yes ☒	
Well perforated in injection zone?		No ☒	Yes ☐	
Cemented across injection zone?		No ☒	Yes ☐	
Packer immediately above injection zone (<100')?		No ☐	Yes ☐	No Packer ☐
		If No: Provide Depth:		
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒	

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**

Bottom Hole Injection Pressure **0**

Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:

Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

41-043-02131

RECORD of Well No. 4 on W. J. Keeling Farm Acres

Field, District County

Rig Commenced 19, Completed 19

Drilling Commenced Jan 26 1917, Completed March 5 1917

Cost per foot, 1.25 Contractor, Boone Drilling Co Address, Henrietta Tex

Drillers' Names F W English & H W Satterfield

CONDUCTOR AND CASING USED IN DRILLING

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅝ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 3-16-Inch	4½ Inch
12						1800				

CONDUCTOR AND CASING LEFT IN WELL

Conductor	13 Inch	10 Inch	8¼ Inch	8 Inch	7⅝ Inch	6⅝ Inch	6¼ Inch	5⅝ Inch	5 3-16 Inch	4½ Inch
12						1800				

OIL WELL / GAS WELL

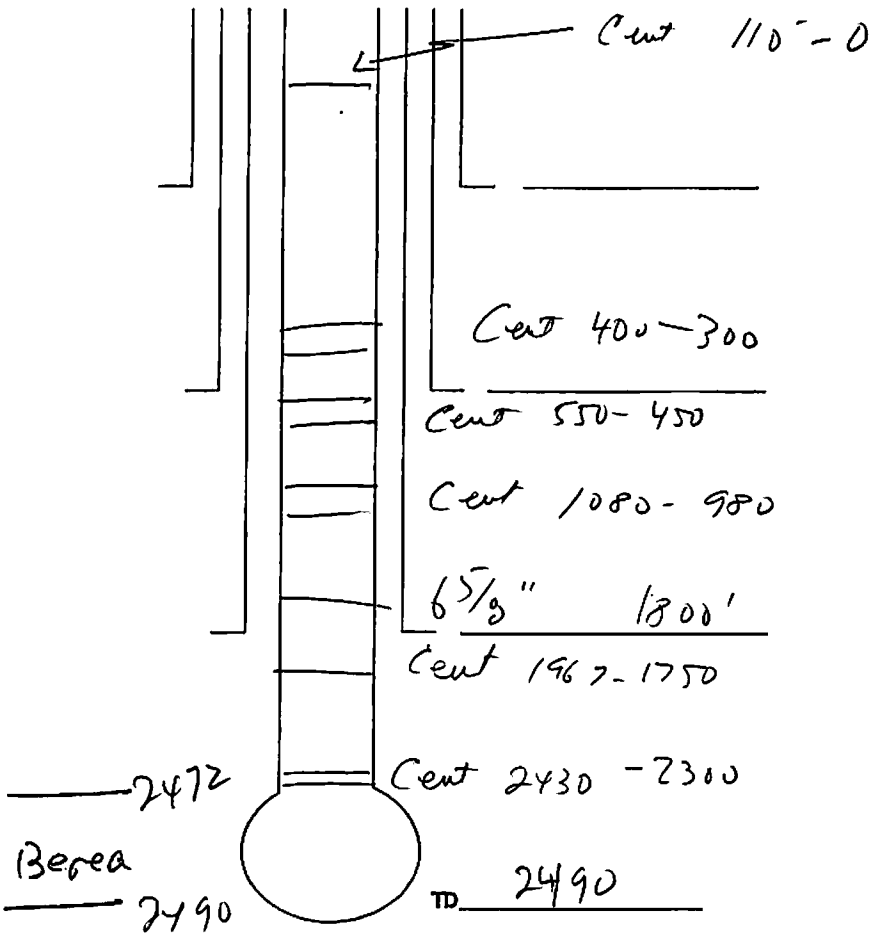
When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods		Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure
3/10/17	80 qts									

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Soil		12	12	
Red Rock	12	112	100	Coal 365'
Sand	112	162	50	
Slate	162	202	40	Reamed hole from 10" to 8" 380'
Sand	202	302	100	
Slate	302	322	20	
Sand	322	365	43	Hole full salt Water 1140'
Slate	365	400	35	
Sand	400	600	200	E-9 0 1
Slate	600	640	40	
Sand	640	900	260	
Slate	900	930	30	
Sand	930	980	50	
Slate	980	1020	40	
Sand	1020	1070	50	
Slate	1070	1100	30	
Salt Sand	1100	1727	627	
Slate	1727	1730	3	
Wharton Sand	1730	1750	20	
Slate	1750	1752	2	
Black Lime	1752	1787	35	
Bruce Cap	1787	1793	6	
White Lime	1793	1978	185	
Ingram Sand	1978	2038	60	
Slate	2038	2103	65	
Shells	2103	2253	150	
Slate	2253	2450	197	
Brown Shale	2450	2472	22	
Bend Grit	2472	2490	18	

W S Keeling 4

Griffithsville Unit #2 Field

47-043- 02131



From Drillers Records/Plugging Records

WWR-38

API# 47-043-2131

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY
DIVISION 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: W.S. Keeling
LOCATION: Elevation: 996'
District: Duval
Latitude: _____
Longitude: _____

Operator Well No.: No. 4
Quadrangle: Griffithsville 7.5'
County: Lincoln
Deg. ____ Min. ____ Sec. ____
Deg. ____ Min. ____ Sec. ____

Well Type: Oil X Gas ____ WIW ____

Company: East Resources Inc.
P.O. Box 5519
Vienna, WV 26105
Agent: Philip S. Ondrusek
Inspector: Ralph Triplett
Permit Issued: ##

Coal Operator or Owner: NA
Coal Operator or Owner: NA

RECEIVED
Office of Oil & Gas
AUG 10 2010
WV Department of
Environmental Protection

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Wood ss:
Mark Miller and Paul Stevens 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 East Resources Inc., well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 16th day of July, 2010', and that the well was plugged and filled in the following manner:

TYPE	FROM	TO	PIPE REMOVED	LEFT
Cement	2430'	2300'	6 5/8" 0'	1800'
Cement	1967'	1750'	5 3/16" 20'	1800'
Cement	1080'	980'		
Cement	550'	450'		
Cement	400'	300'		
Cement	110'	0'		
	Perforated 5 3/16" casing, 3 shot fro 1960' - 1957'. Perforated 5 3/16" &			
	6 5/8" casing, 3 shots from 1780' - 1777' & 1070' - 1067'. Perforated 6 5/8"			
	casing, 3 shots from 500' - 497' & 100' - 97'.			
6% Gel Between Cement Plugs	NOTE: 5 3/16" casing parted & fell down hole - top of casing @ 680'.			

Description of monument: 5 1/2" x 8'
and that the work of plugging and filling said well was completed on the 2nd day of August, 2010'
And further deponents saith not.

Mark Miller
Roger McComas

Sworn and subscribe before me this 9th day of August 2010

My commission expires: Nov. 12, 2018

Notary Public

Affidavit reviewed by the Office of Oil and Gas:

Ralph D. Triplett
Title: District Inspector

OFFICIAL SEAL
NOTARY PUBLIC
STATE OF WEST VIRGINIA
TINA L. PETITTE
East Resources, Inc
P. O. Box 5519
Vienna, West Virginia 26105
My Commission Expires Nov. 12, 2018

WVDEP OOG Internal Use Only
Rev. 6/14/16

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AOR - Well Review Checklist

API Number: 47- 0 2132 Area Permit Number: 2R AP
Operator Name: H6E
Operator's Well #: 5
Farm Name: WS Keeling
Field Name: Bottleville Unit 2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☐ Producer (NonWaterflood) ☒ Observation ☐ Other ☐
Well Status: Active ☒ Abandoned ☐ Plugged ☐
TD of well: 4129
Completion Zones: Dev Shale Perforated Interval: 2682' - 3970

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 417,973 Northing: 4,233,011
Elevation: 280
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐	
Date of Last MIT:	Passed?	No ☐	Yes ☐	
Open Hole Completion		No ☒	Yes ☐	
Well penetrates injection zone?		No ☐	Yes ☒	
Well perforated in injection zone?		No ☒	Yes ☐	
Cemented across injection zone?		No ☐	Yes ☒	
Packer immediately above injection zone (<100')?		No ☐	Yes ☐	No Packer ☐
		If No: Provide Depth:		
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒	

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = 0
Bottom Hole Injection Pressure 0
Hydrostatic Pressure 0

Comments:

Drilled Deeper + Completed in Devonian Shale
Berea Cemented off prior to DD
3½" cemented - TOC @ 2408'

Reviewer Name: Signature:
Date Reviewed:

** Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-02132

10/01/2003 09:08 13845242813 EAST RESOURCES INC PAGE 03

Lease No. 71096 Acres 65 Farm Name W. S. Keeling Well No. (5)

Map 12410 1½ M. N.W. from Train Waters of Jonas Fork of Trace Fork

N. S. 81 E. W. 75 Location Made

Civil District Duval Rig Completed Aug. 10, 1918

County Lincoln Dr'g Commenced Aug. 30, 1918

State West Virginia Dr'g Completed Oct. 23, 1918

GAS OIL Rights Owned By Dr'g Contractor S. P. Drlg. Dept.

Purchased From

Date Purchased

Sold To

Date Sold

Date Abandoned

FORMATION

Kind	Top	Bottom	Steel Line Measurement	Tests
Clay	0	16		
Red Rock	16	50		
Sand	50	80		
Slate & Shells	80	160		
Sand	160	185		
Coal	185	190		
Slate & Shells	190	250		
Sand	250	290		
Slate	290	340		
Sand	340	375		
Coal	375	380		
Sand	380	400		
Slate & Shells	400	520		
Sand	520	550		
Slate & Shells	550	750		
Sand	750	785		
Slate	786	800		
Sand	800	860		
Slate & Shells	860	986		
Salt Sand	986	1615		
Water	1080			Hole Full.
Maxon Sand	1615	1675		
Little Lime	1675	1709		
Pencil Cave	1709	1715		
Big Lime	1715	1896		
Big Injun	1896	1957		
Slate & Shells	1957	2377		
Brown Shale	2377	2397		
Berea Sand	2397	2417		
Oil	2401	2412		
Total Depth		2417		

Initial Prod.	Sand	* At Completion	* 30 Days After	*
Oil				
Gas				

Oil in Bbls. Gas in M. Cu. Ft.

CASING RECORD

Size	Setting Casing (Steel Line)	Put in Well (Tally Mess.)	Pulled (Tally Mess.)	Cement
8¼	400	410		Date
6-5/8	1723	1734		Size Csg.
5 3/16"		1991-9"		Top "
	5277			Bot. "

PACKERS AND SHOES

Kind	Size	Depth Set	Date S
OWS Hook Wall Packer	5 3/16 X 6 3/8 X 10"	1991-9	8-19-

TORPEDO RECORD

Date	No. Qts.	Size Shell	Top Shot	Bottom	Res
10/25, 1918	90	18	2397	2415	O.F.

DRILLING DEEPER

Commenced	Completed	Original Depth	Final Depth	Contrac

ABANDONMENT RECORD

Filled With	From	To	PLUG Size	PLUG Kind	D

Office of Oil & Gas
Chief

NOV 14 2003

WV Department of Environmental Protection

APPROVED

OVER

WR-35 '

1-Dec-03

API # 47 043 2132

State of West Virginia
Division of Environmental Protection
Section of Oil and Gas

Well Operator's Report of Well Work

Farm name: SNODGRASS, FRED Operator Well No.: KEELING 5

LOCATION: Elevation: 922.66 Quadrangle: GARRETT'S BEND 7.5'

District: DUVAL County: LINCOLN
Latitude: 3,150 Feet south of 38 Deg 15 Min 30 Sec.
Longitude: 5,975 Feet west of 81 Deg 55 Min 00 Sec.

Company: EAST RESOURCES, INC.
P.O. BOX 5519
VIENNA, WV 26105-5519

Agent: PHILIP S. ONDRUSEK

Inspector: RALPH TRIPLETT
Permit Issued: 12/01/03
Well work Commenced: 02/23/04
Well work Completed: 03/18/04
Verbal plugging
permission granted on: _____
Rotary X Cable _____ Rig
Total Depth (feet) 4129
Fresh water depths (ft) NA

Salt water depths (ft) NA
NA

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

Casing & Tubing	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
Size 8 1/4"	410'	410'	existing
6 5/8"	1723.00'	1723.00'	existing
5 3/16"	1798.00'	1798.00'	existing
3 1/2"	4112.25'	4112.25'	50 sks

OPEN FLOW DATA

Producing formation Devonian Shale Pay zone depth (ft) 2682-3970
Gas: Initial open flow 0 MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow 19 MCF/d Final open flow * Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock pressure _____ psig (surface pressure) after 24 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

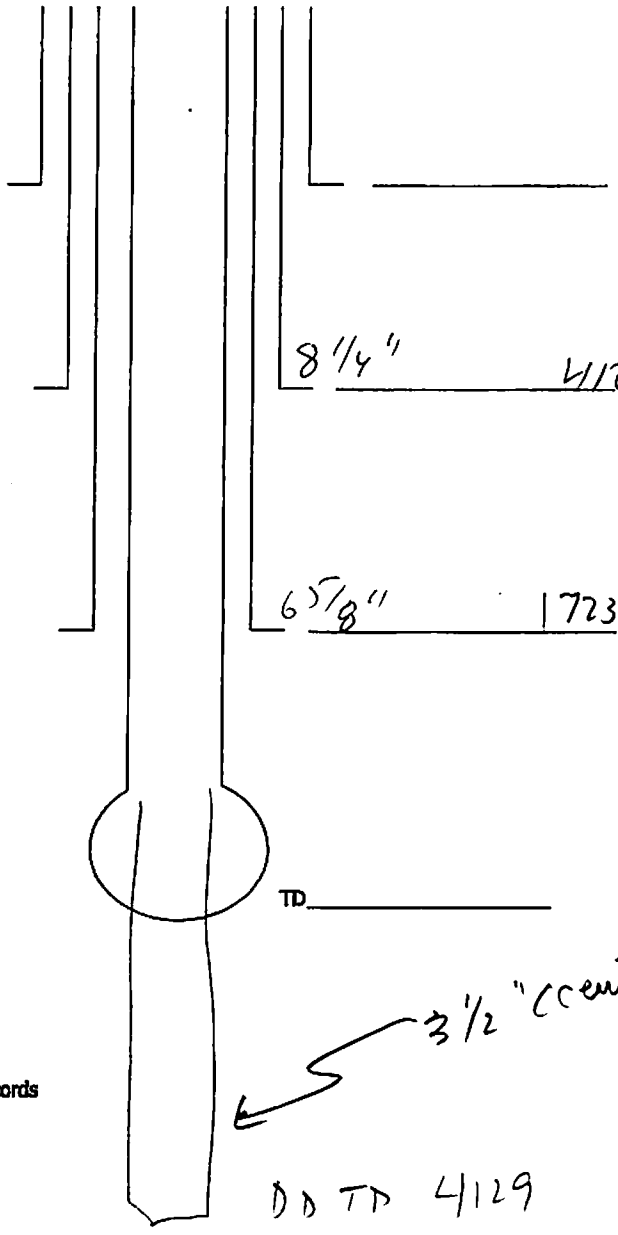
NOTE: ON BACK OF THIS FORM, PUT THE FOLLOWING: 1) DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2) THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

For: EAST RESOURCES, INC.
By: Ben Holdren
Date: 5/19/04

W S Keeling 5

Griffithsville Unit #2 Field

47-043- 02132



2397

Berea

2417

From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
rev. 6/14/16

(193)

AOR - Well Review Checklist

API Number: 47- 043 - 30837 Area Permit Number: 2R AP

Operator Name: H 6 Energy

Operator's Well #: #1

Farm Name: Creed Kirsey

Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐

Well Status: Active ☐ Abandoned ☐ Plugged ☒

TD of well: 2405

Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐

Easting: 418,315 Northing: 4,231,504

Elevation: 275

Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐	
Date of Last MIT:	Passed?	No ☐	Yes ☐	
Open Hole Completion		No ☐	Yes ☒	
Well penetrates injection zone?		No ☐	Yes ☒	
Well perforated in injection zone?		No ☒	Yes ☐	
Cemented across injection zone?		No ☒	Yes ☐	
Packer immediately above injection zone (<100')?		No ☐	Yes ☐	No Packer ☐
		If No: Provide Depth:		
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒	

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**

Bottom Hole Injection Pressure **0**

Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:

Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47.043 - 30837

RECORD of Well No. 1 on W. B. Bingamon Farm Acres Unstated.
Field. Davis District Leadsville County. Webster
Rig Commenced ..... 19..., Completed ..... 19...
Drilling Commenced Aug 2 1910., Completed Sept 14 1910
Cost per foot, 1.10 Contractor. Weller Bros Address, Upshur, W. Va.
Drillers' Names, S. E. & Sylvander & E. L. Stillwagon

CONDUCTOR AND CASING USED IN DRILLING.

Conductor	13 inch	10 inch	8¼ inch	8 inch	7¼ inch	6¼ inch	6¼ inch	5¼ inch	5 inch	4¼ inch
16						1707				

CONDUCTOR AND CASING LEFT IN WELL.

Conductor	13 inch	10 inch	8¼ inch	8 inch	7¼ inch	6¼ inch	6¼ inch	5¼ inch	5 inch	4¼ inch
16						1707				

OIL WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods
9/16/10	80 qts.	2nd Shot 9/25/10	1009 ft.	

GAS WELL

Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Soil		16	16	Hit rock 10" hole to 8"
Slate	16	75	59	at 285' Ans 8" casing used
Sand	75	100	25	
Slate	100	170	70	
Sand	170	200	30	3' Coal at 355'
Slate	200	230	30	
Sand	230	380	150	Hole full of water at
Slate	380	390	10	1020'
Sand	390	450	60	
Slate	450	470	20	Elevation
Sand	470	500	30	
Slate	500	550	50	
Sand	550	600	50	
Slate	600	700	100	
Sand	700	750	50	
Slate	750	800	50	
Sand & Shale	800	1000	200	
Salt Sand	1000	1670	670	
Little Lime	1670	1690	20	
Pencil	1690	1695	5	
Big Lime	1695	1865	170	
Sand	1865	1935	70	
Brn. Shale	1935	2363	428	
Brn. Shale	2363	2385	22	
Sand	2385	2405	20	

Shot 8/8/10 - 120 qts. Berea Sand
Result — a fair Blow

FORM OG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

47-043-30837

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

South Penn Gas Compa ny
LEASE OR PROPERTY OWNER

Parkersburg, West Virginia
ADDRESS

West Virginia Pipe Project
NAME OF WELL OPERATOR

Box 2462, Tulsa, Oklahoma
COMPLETE ADDRESS

October 17, 1949 19

WELL AND LOCATION

Duval District

Lincoln County

Well No. 1

W. C. Kingery Farm

Dana E. Lawson

STATE INSPECTOR SUPERVISING PLUGGING

AFFIDAVIT

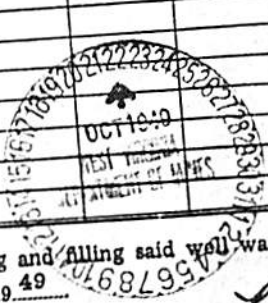
STATE OF WEST VIRGINIA,
County of Lincoln } ss:

Paul Mize and Ellis Sowards

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 West Virginia Pipe Project, well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 12th day of October, 1949, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD	FILLING MATERIAL			PLUGS USED	CASING	
FORMATION	CONTENT	FROM	TO	SIZE & KIND	CSG PULLED	CSG LEFT IN
Pulled tubing. Set bridge at 2366' (20' above Berea) 2 sacks neat cement a nd 5' crushed stone, clay to 2265', cement to 2255'. Set bridge at 1935' (bottom of Big Injun) 2 sacks neat cement and 5' crushed stone, clay to 1737' (30' below 6-5/8" casing, cement to 1727', 5' crushed stone, sealing hole completely below 6-5/8" casing. Pulled 6-5/8" casing as balance of hole was plugged and filled. Set bridge at 1130' (in Salt Sand) 2 sacks neat cement and 5' crushed stone on bridge. Clay to 980' (20' above Salt Sand) cement to 970'. Set bridge a t 250', 2 sacks neat cement and 5' crushed stone, clay to surface and erected monument.					1707' of	6-5/8"

COAL SEAMS	DESCRIPTION OF MONUMENT
(NAME)	12" x 12" x 30"
(NAME)	
(NAME)	
(NAME)	



and that the work of plugging and filling said well was completed on the 15th day of October, 1949

And further deponents saith not.

Paul Mize
Ellis Sowards

Sworn to and subscribed before me this 20th day of October, 1949

J R Osborne
Notary Public.

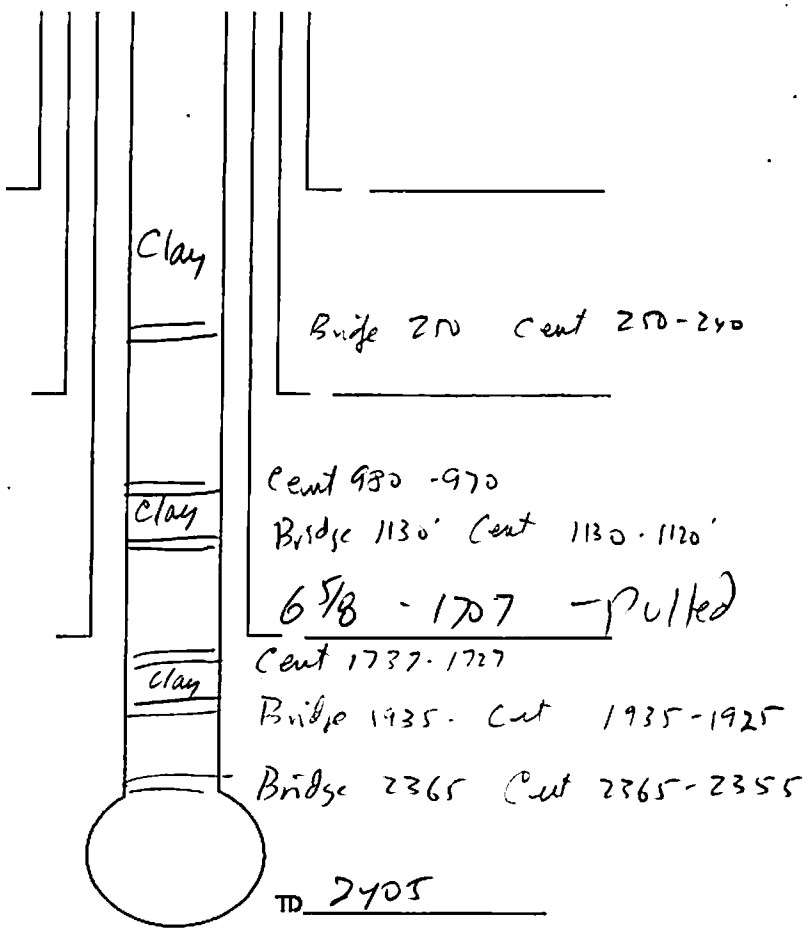
My commission expires:
10-9-57

Permit No. LIN-837

Creek Kings #1

Griffithsville Unit #2 Field

47-043- 30837



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

(194)

AOR - Well Review Checklist

API Number: 47- 043 - 30596 Area Permit Number: 2R AP

Operator Name: H 6 Energy

Operator's Well #: 2

Farm Name: Creek / Gregory

Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐

Well Status: Active ☐ Abandoned ☐ Plugged ☒

TD of well: 2383

Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐

Easting: 418,267 Northing: 4,231,732

Elevation: 271

Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☐

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = 0

Bottom Hole Injection Pressure 0

Hydrostatic Pressure 0

Comments:

Reviewer Name: Signature:

Date Reviewed:

** Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043 - ~~20310~~
30598

RECORD of Well No. 2 on W. C. Shuey Farm Acres

Field, District County

Rig Commenced 19, Completed 19

Drilling Commenced Oct 6 1910, Completed Nov 19 1910

Cost per foot, 1.10 Contractor, Waller Bros Address, Spurby, W. Va.

Drillers' Names, E. L. Shillingburg & L. E. Sylvester

CONDUCTOR AND CASING USED IN DRILLING.

Conductor	13 inch	10 inch	8¼ inch	8 inch	7¼ inch	6⅝ inch	6¼ inch	5⅛ inch	5 3-16 inch	4¼ inch
16				256		1675'				

CONDUCTOR AND CASING LEFT IN WELL.

Conductor	13 inch	10 inch	8¼ inch	8 inch	7¼ inch	6⅝ inch	6¼ inch	5⅛ inch	5 3-16 inch	4¼ inch
16						1675'				

OIL WELL — GAS WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods	Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure
11/22/10	80 qt.	2nd Shot 7/23/13		110 qts.					

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Soil		12	12	
Sand	12	16	4	
Coal	16	85	69	Water, little, full 65'
Slate	85	140	55	
Sand	140	170	30	
Slate	170	220	50	
Coal	220	240	20 (60)	
Slate	240	260	20	Gas 3' at 260'
Sand	260	470	310 (215)	
Slate	470	500	30	
Sand	500	640	140	
Slate & Shells	640	680	40	
Sand	680	720	40	
Slate	720	850	130	
Coal	850	900	50	Water at 860'
Slate	900	940	40	
Sand	940	970	30	
Slate	970	1010	40	
Red Sand	1010	1615	605	Hole full water at 1030'
Slate	1615	1625	10	
Black Lime	1625	1670	45	
Pencil	1670	1675	5	
Big Lime	1675	1845	170	
Keener Sand	1845	1945	100	
Berea Shale	1945	2344	399	
Brown Shale	2344	2364	20	
Berea Sand	2364	2383	19	

FORM OG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

47-043-30596

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

LEASE OR PROPERTY OWNER

ADDRESS

UNited Fuel Gas Company
NAME OF WELL OPERATOR
Charleston, W. Va.
COMPLETE ADDRESS
March 11 1949
WELL AND LOCATION
Duval District
Lincoln County
Well No. 2
W. C. Kingery Farm
D. E. Lawson

STATE INSPECTOR SUPERVISING PLUGGING

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

Basil Pack and John McCallister 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 R. H. Adkins, well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 17 day of Feb., 1949, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD	FILLING MATERIAL			PLUGS USED	CASING	
FORMATION	CONTENT	FROM	TO	SIZE & KIND	CSG PULLED	CSG LEFT IN
Set a Permanent Bridge at 2344' - 20' above 2344' - 2334'. 5' crushed stone on bridge. Filled with clay to 2234' neat cement 2234' - 2224'.				Berea Sand Neat Cement		
Set a Permanent Bridge at 1875' - 30' below cement and 5' crushed stone on bridge. Filled with clay to 1737' - 30' below 5-3/16" Casing neat cement 1737' - 1727'. 5' crushed stone on cement plug.				Big Lime 2 sacks neat		
Pulled 5-3/16" Casing						
Pulled 6-5/8" CASING AS BALANCE OF HOLE WAS FILLED AND PLUGGED. Filled with clay to 990' - 20' above Salt Sands, Neat cement 990' - 980'. 5' Crushed stone on cement Plug.						
Opened hole to 200' Set a permanent Bridge at 200', 2 sacks neat cement and 5' crushed stone on bridge. Filled with clay to surface. Erected a marker such as is described in Rule 18, 1931 Regulations.						

COAL SEAMS	DESCRIPTION OF MONUMENT
(NAME)	U.F.G.CO.
(NAME)	W. C. Kingery # 2
(NAME)	Date of Abandonment
(NAME)	

and that the work of plugging and filling said well was completed on the 25th day of February, 1949

And further deponents saith not.

Basil Pack
John McCallister

Sworn to and subscribed before me this 11th day of March, 1949

Notary Public.

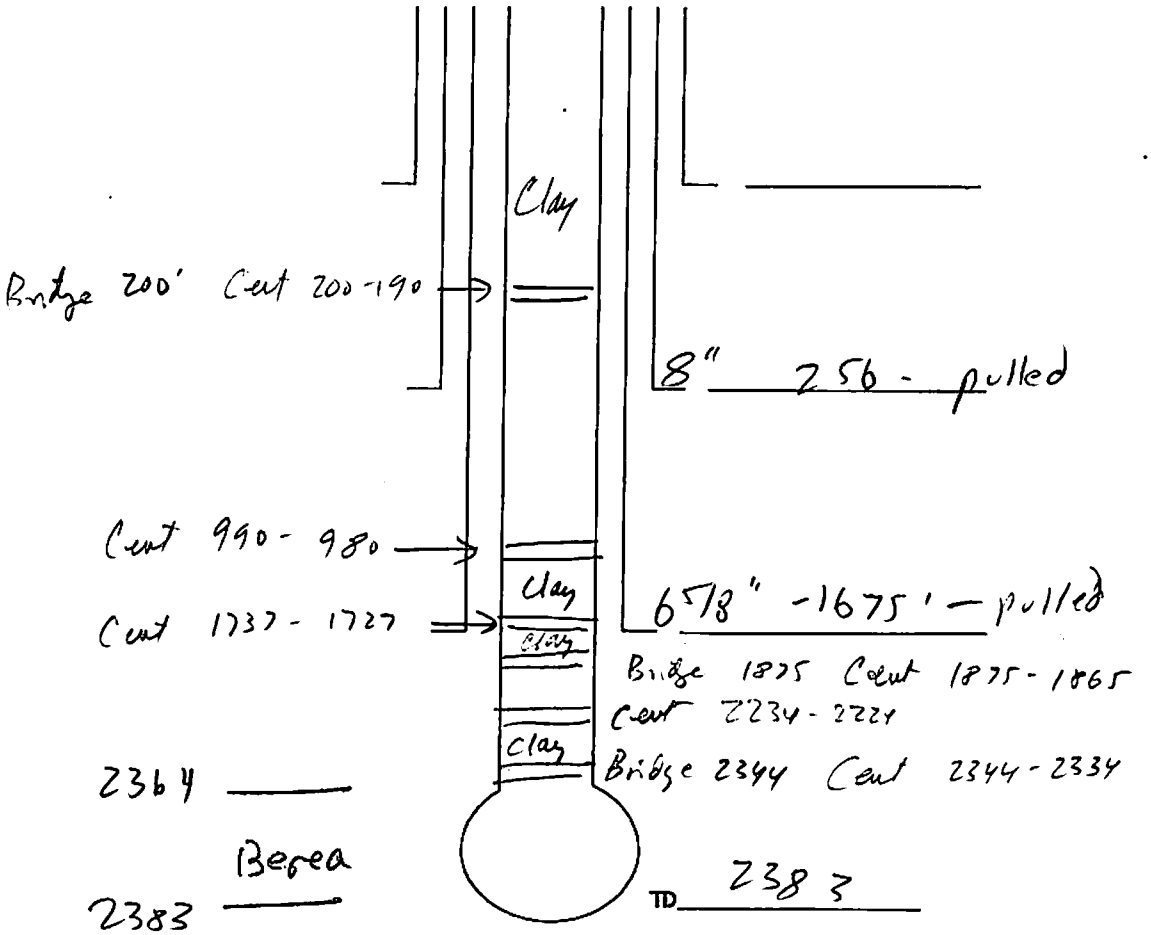
My commission expires:
Sept 4 1957

Permit No. LIN-596

Creed Kingsley 2

Griffithsville Unit #2 Field

47-043- 30596



From Drillers Records/Plugging Records

195

WVDEP OOG Internal Use Only
Rev. 6/14/16

AOR - Well Review Checklist

API Number: 47- 043 - 30838 Area Permit Number: 2R AP
Operator Name: H & E Energy
Operator's Well #: 3
Farm Name: Creed Kinsey
Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐
Well Status: Active ☐ Abandoned ☐ Plugged ☒
TD of well: 2427
Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐
Easting: 418,203 Northing: 4,231,921
Elevation: 277
Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**

Bottom Hole Injection Pressure **0**

Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:

Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-30838

201

1

RECORD of Well No. 3 on H. C. Burger Farm Acres

Field, District County,

Rig Commenced 19, Completed 19

Drilling Commenced Dec 12 1911, Completed March 29 1911

Cost per foot, 1.15 Contractor, Gandy & Emmanuelle Address, Yawkey, W. Va.

Drillers' Names, P. J. Hurley & J. D. Bailey

CONDUCTOR AND CASING USED IN DRILLING.

Conductor	13 Inch	10 Inch	8¼ Inch	6 Inch	7⅝ Inch	6⅝ Inch	6¼ Inch	6⅝ Inch	6 5/16 Inch	4¾ Inch
16						1735'				

CONDUCTOR AND CASING LEFT IN WELL.

Conductor	13 Inch	10 Inch	8¼ Inch	6 Inch	7⅝ Inch	6⅝ Inch	6¼ Inch	6⅝ Inch	6 5/16 Inch	4¾ Inch
16						1735'				

OIL WELL — GAS WELL

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods		Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure
4/6/11	80 qts.	2nd Shot 5/16 13 90 qts.				3rd Shot 5/16 13 150 qts.				

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Soil & Clay		16	16	21 = 735.31
Slate	16	56	40	
Sand	56	76	20	
Slate & Shells	76	160	84	
Coal	160	163	3	
Slate	163	203	40	
Sand	203	283	80	
Slate	283	320	37	
Coal	320	324	4	
Slate	324	384	60	
Sand	384	464	80	
Slate	464	535	71	
Coal	535	540	5	
Slate & Sand	540	990	450	Hole full of water at 1100
Slate	990	1030	40	
Salt Sand	1030	1665	635	
Slate	1665	1680	15	
Little Lime	1680	1715	35	
Pencil Cave	1715	1720	5	Gas in Lime at 1870
Big Lime	1720	1905	185	
Big Injun	1905	1975	70	
Slate	1975	2030	55	
Keener	2030	2120	90	
Slate	2120	2315	195	
Slate & Shells	2315	2385	70	
Berea Grit	2385	2407	22	
Berea Sand	2407	2427	20	

8280E-EYO-TN

47-043-30838

FORM OG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

South Penn Gas Company
LEASE OR PROPERTY OWNER

Parkersburg, West Virginia
ADDRESS

West Virginia Pipe Project
NAME OF WELL OPERATOR

Box 2452, Tulsa, Oklahoma
COMPLETE ADDRESS

October 5, 1949 19

WELL AND LOCATION

Duval District

Lincoln County

Well No. 3

W. C. Kingery Farm

STATE INSPECTOR SUPERVISING PLUGGING Dana E. Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

Donald E. Millison and E. J. Mizny 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 West Virginia Pipe Project well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 21st day of September, 19 49, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD FORMATION	FILLING MATERIAL CONTENT	FROM	TO	PLUGS USED SIZE & KIND	CASING CSG PULLED	CSG LEFT IN
	Pulled tubing. Set bridge at 2387' (20' above Berea) 2 sacks neat cement and 5' crushed stone, clay to 2287', cement to 2277'. Set permanant bridge at 1975', bottom of Big Injun) 2 sacks neat cement and 5' crushed stone, Pulled 6-3/16" casing. Clay to 1765' (50' below 6-5/8" casing, cement to 1755', 5' crushed stone, sealing hole below 6-5/8" casing. Pulled 6-5/8" casing as balance of hole was plugged and filled. Set bridge at 1160' (in Salt Sand) 2 sacks neat cement and 5' crushed stone, clay to 1010' (20' above Salt Sand) cement to 1000'. Set bridge at 250', 2 sacks neat cement and 5' crushed stone, clay to surface and erected monument.				1799' of 6-3/16" 1735' of 6-5/8"	

COAL SEAMS
(NAME)
(NAME)
(NAME)
(NAME)

DESCRIPTION OF MONUMENT
12" x 12" x 30"

and that the work of plugging and filling said well was completed on the 26th day of September, 19 49

And further deponents saith not.

Donald E. Millison
E. J. Mizny

Sworn to and subscribed before me this 5th day of October, 19 49

J R Osborne
Notary Public.

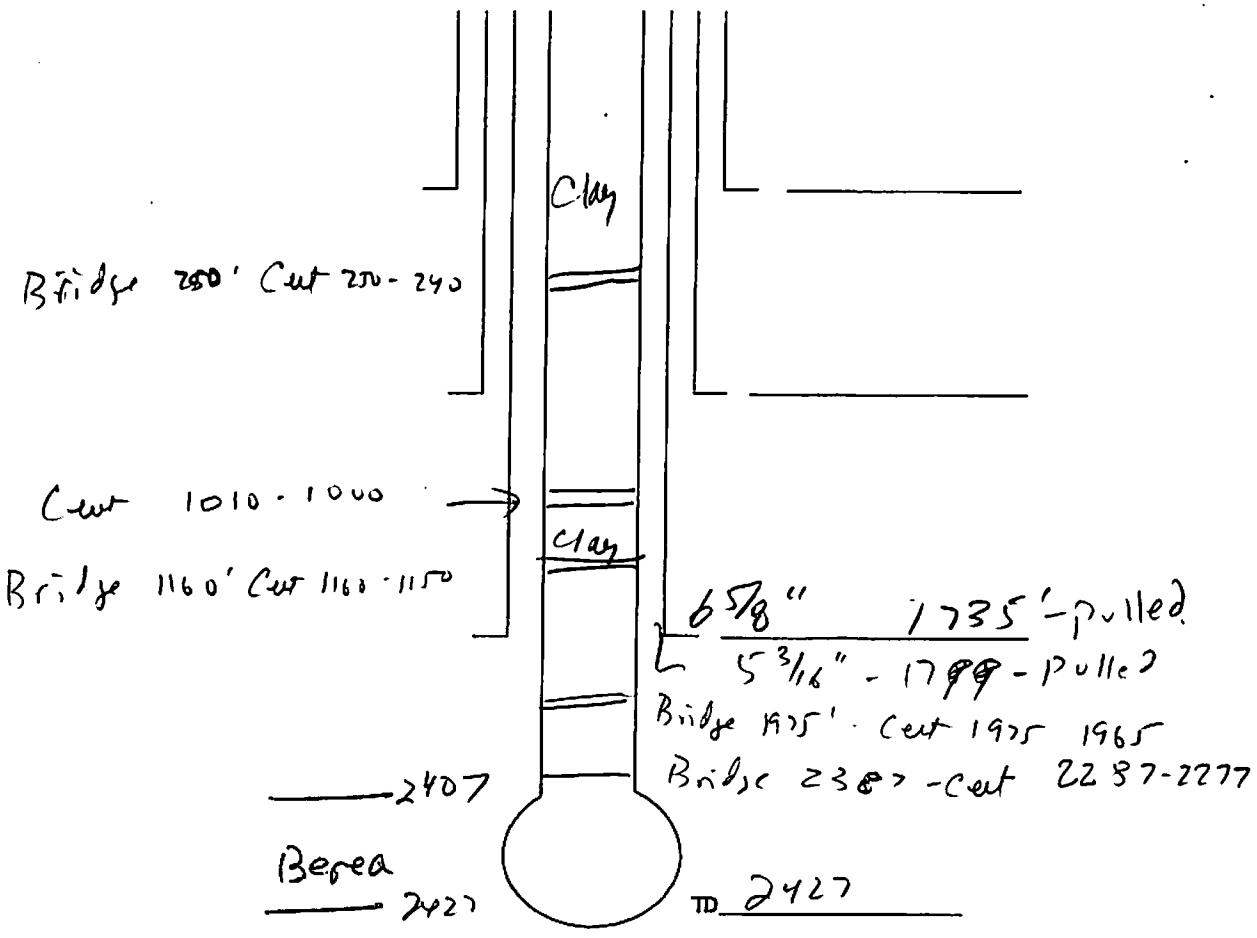
My commission expires:
Oct - 9 - 1957

Permit No. LIN-838

Creed Kings 3

Griffithsville Unit #2 Field

47-043- 30838



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

196

AOR - Well Review Checklist

API Number: 47- 043 - 30839 Area Permit Number: 2R AP

Operator Name: H 6 Energy

Operator's Well #: 4

Farm Name: Creed Heirs

Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐

Well Status: Active ☐ Abandoned ☐ Plugged ☒

TD of well: 2357

Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐

Easting: 418,110 Northing: 4,231,488

Elevation: 276

Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT: 2	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = **0**

Bottom Hole Injection Pressure **0**

Hydrostatic Pressure **0**

Comments:

Reviewer Name: Signature:

Date Reviewed:

* *Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-30839

RECORD of Well No. 4 on W. C. Simpson Farm ... Acres ... /

Field, ... District ... County, ...

Rig Commenced ... 19..., Completed ... 19...

Drilling Commenced Oct 10 1911, Completed May 20 1911

Cost per foot, 1¼ Contractor, Hardy & Simms Co. Address, Hardy, W. Va.

Drillers' Names, O. J. Simpson J. D. Ritz

CONDUCTOR AND CASING USED IN DRILLING.

Conductor	13 inch	10 inch	8¼ inch	8 inch	7¼ inch	6¼ inch	6¼ inch	5¼ inch	5 3-16 inch	4¼ inch
111						1075'				

CONDUCTOR AND CASING LEFT IN WELL.

Conductor	13 inch	10 inch	8¼ inch	8 inch	7¼ inch	6¼ inch	6¼ inch	5¼ inch	5 3-16 inch	4¼ inch
1H						1075'				

OIL WELL **GAS WELL**

When Shot	Size of Torpedo	Ist Day's Production	Tubing	Rock Pressure	Size of Packer	Depth Set	Tubing	Ist Minute Pressure	Rock Pressure
3rd	90 qts								

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
[illegible]		14	14	21=567.77
[illegible]	14	54	40	
[illegible]	54	114	60	240' of 16" [illegible]
[illegible]	114	194	80	
[illegible]	194	250	56	
[illegible]	250	255	5	
[illegible]	255	315	60	[illegible]
[illegible]	315	375	60	[illegible]
[illegible]	375	440	65	
[illegible]	440	443	3	
[illegible]	443	475	32	
[illegible]	475	480	5	[illegible]
[illegible]	480	920	440	
[illegible]	920	960	40	
[illegible]	960	1604	644	
[illegible]	1604	1614	10	Gas 100' in Big Injun
[illegible]	1614	1652	38	
[illegible]	1652	1657	5	
[illegible]	1657	1842	185	
[illegible]	1842	1917	75	
[illegible]	1917	1977	60	
[illegible]	1977	2087	110	
[illegible]	2087	2247	160	
[illegible]	2247	2317	70	
[illegible]	2317	2337	20	
[illegible]	2337	2357	20	

FORM OG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

47-043-30839

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER

ADDRESS

COAL OPERATOR OR OWNER

ADDRESS

South Penn Gas Company
LEASE OR PROPERTY OWNER

Parkersburg, West Virginia
ADDRESS

West Virginia Pipe Project
NAME OF WELL OPERATOR

Box 2452, Tulsa, Oklahoma
COMPLETE ADDRESS

October 7, 1949 19
WELL AND LOCATION

Duval District

Lincoln County

Well No. 4

W. C. Kingery Farm

Dana E. Lawson

STATE INSPECTOR SUPERVISING PLUGGING

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Lincoln } ss:

Odis Parsons and S. S. Stephens, Jr.

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 West Virginia Pipe Project well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 24th day of September, 1949, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD	FILLING MATERIAL			PLUGS USED	CASING	
FORMATION	CONTENT	FROM	TO	SIZE & KIND	CSG PULLED	CSG LEFT IN
Pulled tubing. Set bridge at 2317' (20' above Berea) 2 sacks neat cement and 5' crushed stone, clay to 2217', cement to 2207'. Set bridge at 1917' (bottom of Big Injun) 2 sacks neat cement and 5' crushed stone. Pulled 5-3/16" casing. Fill with clay to 1705' (30' below 6-5/8" casing, cement to 1695', 5' crushed stone, sealing hole completely below 6-5/8" casing. Pulled 6-5/8" casing, as balance of hole was plugged and filled. Set bridge at 1060' (in Salt Sand) 2 sacks neat cement and 5' crushed stone, clay to 940' (20' above Salt Sand), cement to 930'. Set bridge at 250', 2 sacks neat cement and 5' crushed stone, clay to surface and erected monument.					1719' of 5-3/16"	
					1675' of 6-5/8"	

COAL SEAMS	DESCRIPTION OF MONUMENT
(NAME)	12" x 12" x 30"
(NAME)	
(NAME)	
(NAME)	

OCT 1949
WEST VIRGINIA
DEPARTMENT OF MINES

and that the work of plugging and filling said well was completed on the 30th day of September, 1949.

And further deponents saith not.

Odis Parsons

S. S. Stephens Jr.

Sworn to and subscribed before me this 10th day of October, 1949

J R Osborne
Notary Public.

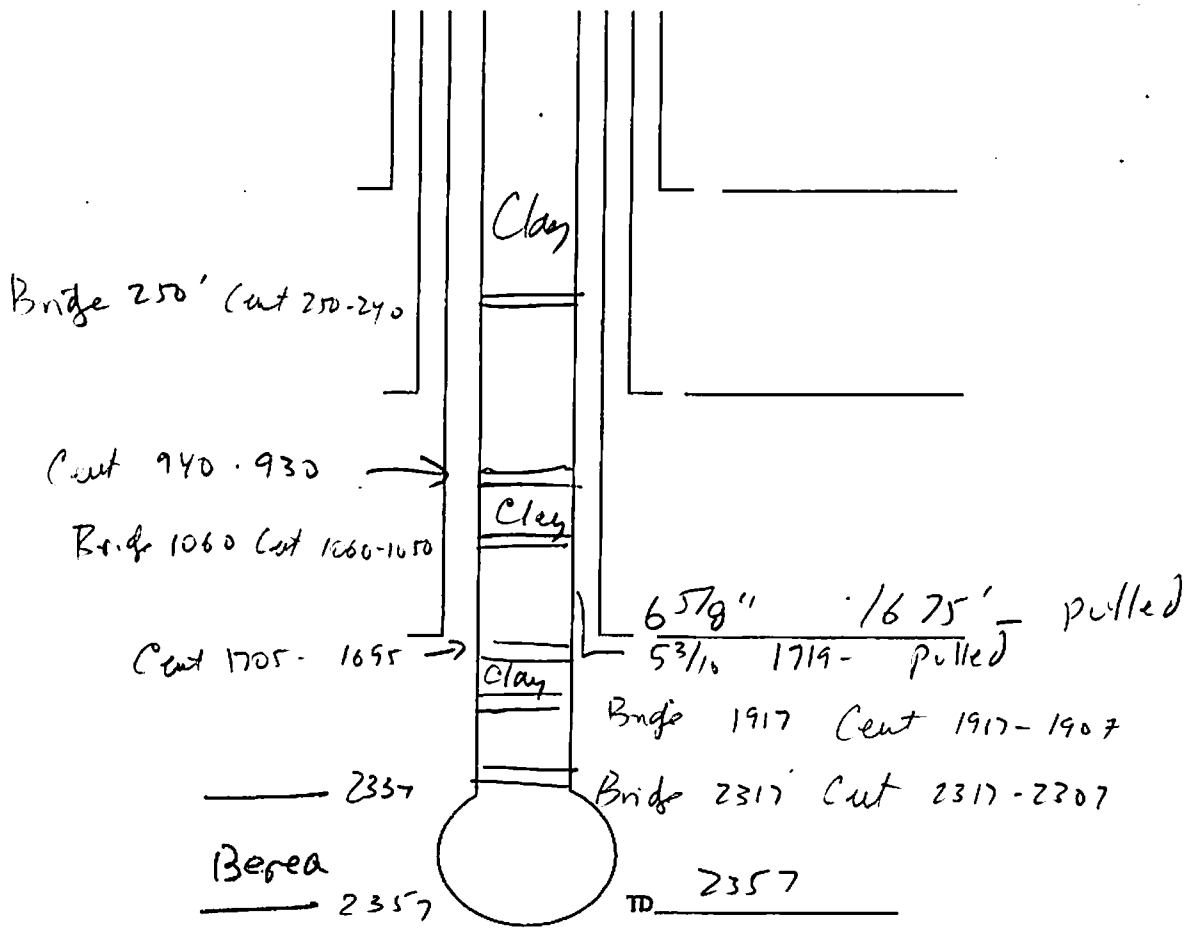
My commission expires:
Oct-9-1957

Permit No. LIN-839

Creed Kinsey 4

Griffithsville Unit #2 Field

47-043- 30839



From Drillers Records/Plugging Records

WVDEP OOG Internal Use Only
Rev. 6/14/16

197

AOR - Well Review Checklist

API Number: 47- 043 - 30618 Area Permit Number: 2R AP

Operator Name: H 6 Energy

Operator's Well #: 5

Farm Name: Creed King

Field Name: Griffithsville Unit #2 Field Injection Zone: Berea

Well Type: Injector ☐ Producer (Waterflood) ☒ Producer (NonWaterflood) ☒ Observation ☐ Other ☐

Well Status: Active ☐ Abandoned ☐ Plugged ☒

TD of well: 2581

Completion Zones: Berea. Perforated Interval:

Well Location (UTM NAD83) Coordinates Match?: No ☐ Yes ☐

Easting: 417,884 Northing: 4,231,434

Elevation: 319

Inside Field Boundary? ☒ Outside Field Boundary? (1320' or less) ☐

Outstanding Violations:		No ☒	Yes ☐
Date of Last MIT:	Passed?	No ☐	Yes ☐
Open Hole Completion		No ☐	Yes ☒
Well penetrates injection zone?		No ☐	Yes ☒
Well perforated in injection zone?		No ☒	Yes ☐
Cemented across injection zone?		No ☒	Yes ☐
Packer immediately above injection zone (<100')?		No ☐	Yes ☐ No Packer ☐
		If No: Provide Depth:	
Documents indicate this well appears to be adequately constructed/plugged to prevent fluid migration into USDW?		No ☐	Yes ☒

MIP Calculation:

	Top Perf Depth
0.8	Fracture Gradient
0.433	Hydrostatic Fluid Pressure Gradient (H_20)
1.1	Specific Gravity of Injection Fluid *(1.1 default if exact is not known)*

MIP = 0

Bottom Hole Injection Pressure 0

Hydrostatic Pressure 0

Comments:

Reviewer Name: Signature:

Date Reviewed:

** Attach WR-35's and WR-38's for all wells and WR-37's for injection wells.*

47-043-30617

RECORD of Well No. 5 on O. L. Haught Farm ... Acres ...

... Field, ... District ... County ...

Rig Commenced ... 19... Completed ... 19...

Drilling Commenced Aug 9 1911 Completed Oct 5 1911

Cost per foot 11½ Contractor Hershey & Hussman Drlg. Address Hackney W. Va.

Drillers' Names P. J. Hershey & J. D. Bartley

CONDUCTOR AND CASING USED IN DRILLING.

Conductor	13 inch	10 inch	8¼ inch	6 inch	7½ inch	6⅝ inch	6¼ inch	5⅝ inch	5 3-16 inch	4¼ inch
16						1850				

CONDUCTOR AND CASING LEFT IN WELL.

Conductor	13 inch	10 inch	8¼ inch	6 inch	7½ inch	6⅝ inch	6¼ inch	5⅝ inch	5 3-16 inch	4¼ inch
16						1850				

OIL WELL / **GAS WELL**

When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods	Size of Packer	Depth Set	Tubing	1st Minute Pressure	Rock Pressure
10/9/11	90qts.								

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Soil & Clay		16	16	Cased 10" in Big Lime
Slate	16	36	20	
Red Rock	36	96	60	EL: 1066.27
Sand	96	136	40	
Slate	136	216	80	
Sand	216	256	40	
Slate	256	381	125	
Sand	381	431	50	
Slate	431	460	29	
Coal	460	463	3	
Slate & Sand	463	640	177	500' of 10" hole
Coal	640	644	4	
Sand & Slate	644	1150	506	Hole full of water at 1220
Salt Sand	1150	1770	620	
Slate	1770	1796	26	
Little Lime	1796	1836	40	
Pencil Cave	1836	1840	4	
Big Lime	1840	2025	185	Gas 100' in Big Lime
Big Injun	2025	2095	70	
Slate	2095	2175	80	
Lime Shells	2175	2350	175	
Slate	2350	2520	170	
Brown Shale	2520	2540	20	
Berea Sand	2540	2561	21	

FORM OG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

47-043-30618

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, 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.

COAL OPERATOR OR OWNER: ——— NAME OF WELL OPERATOR: United Fuel Gas Company

ADDRESS: ——— COMPLETE ADDRESS: Charleston, W. Va.

COAL OPERATOR OR OWNER: ——— WELL AND LOCATION: July 12, 1949

ADDRESS: ——— Duval District

LEASE OR PROPERTY OWNER: ——— Lincoln County

ADDRESS: ——— Well No. 5

W. C. Kingery Farm

STATE INSPECTOR SUPERVISING PLUGGING D. E. Lawson

AFFIDAVIT

STATE OF WEST VIRGINIA, }
County of Lincoln } ss:

Kenzie Browning and E. J. Elkins, Jr. 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 R. H. Adkins, well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 26 day of June, 1949, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD — FORMATION	FILLING MATERIAL — CONTENT	FROM	TO	PLUGS USED — SIZE & KIND	CASING — CSG PULLED	CSG LEFT IN
Berea	Set Bridge 20' above Berea at 2520'. Filled hole 100' with non-porous material. Set 10' Cement Plug on same, sealing off Berea Sand. 5' Crushed stone on cement plug.					
Lime - Injun	Set Bridge 20' below Big Injun Sand at 2125', Filled hole through Big Injun and Big Lime with non-porous material to 30' below pipe. Set 10' cement Plug on same at 1880' to 1870', sealing off Big Injun and Big Lime. Set 5' crushed stone on cement plug. Filled hole as pipe was removed.					
Salt Sand	Filled hole from 1870' with non-porous material to 20' above top of Salt Sand. Set 10' cement Plug on same at 1130' to 1120', sealing off Salt Sand. Opened hole to 200'; Set Bridge and 10' Cement Plug on same at 200' to 190'.					
	Filled hole with non-porous material to surface. Set Cement Marker 12"x 12" x 30" marking date of abandonment.					

COAL SEAMS
(NAME)
(NAME)
(NAME)
(NAME)

DESCRIPTION OF MONUMENT
U. F. GAS CO.
W. C. KINGERY # 5
DATE OF ABANDONMENT

JUL 1949
WEST VIRGINIA
DEPARTMENT OF MINES

and that the work of plugging and filling said well was completed on the 6 day of July, 1949.

And further deponents saith not.

E. J. Elkins, Jr.
Kenzie Browning

Sworn to and subscribed before me this 6 day of July, 1949.

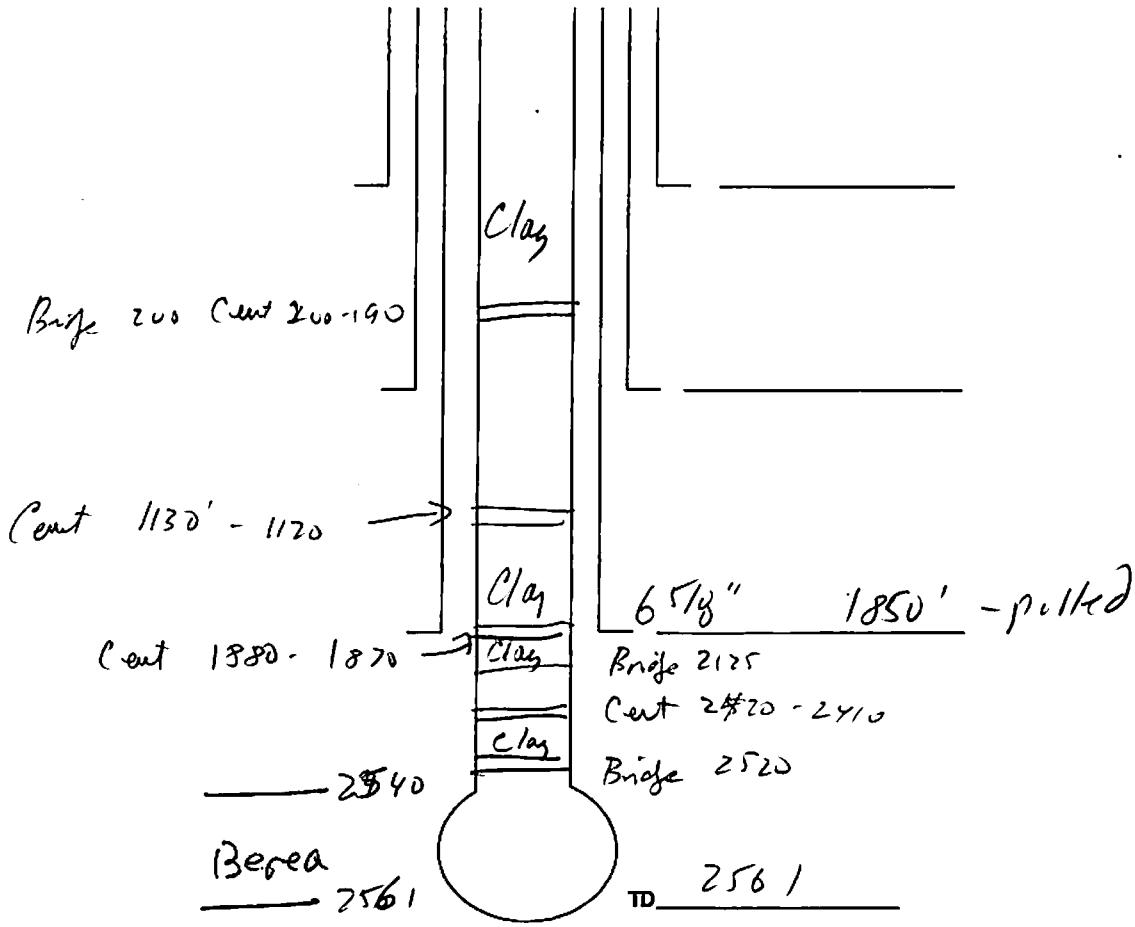
Notary Public.

Permit No. LIN-618

Creed King 5

Griffithsville Unit #2 Field

47-043-30618



From Drillers Records/Plugging Records