

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

API 47-103-02950 County Wetzel District Proctor
Quad New Martinsville Pad Name Erlewine Field/Pool Name Mary
Farm name Erlewine, Richard Well Number Erlewine 1H
Operator (as registered with the OOG) EQT Production Company
Address 625 Liberty Avenue, Suite 1700 City Pittsburgh State Pennsylvania Zip 15222

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 4,392,652 Easting 517,392
Landing Point of Curve Northing 4,392,813 Easting 516,967
Bottom Hole Northing 4,394,050 Easting 516,539

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

Drilling Media Surface hole Air Mud Fresh Water Intermediate hole Air Mud Fresh Water Brine
Production hole Air Mud Fresh Water Brine
Mud Type(s) and Additive(s)

Date permit issued 12/20/2018 Date drilling commenced 7/8/2014 Date drilling ceased 1/25/2015
Date completion activities began 03/25/2019 Date completion activities ceased 03/29/2019
Verbal plugging (Y/N) N Date permission granted _____ Granted by _____

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Environmental Protection

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

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

Reviewed

Reviewed by: Dmt

[Handwritten signature]

API 47- 103 - 02950 Farm name Erlewine, Richard Well number Erlewine 1H

CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade wt/ft	Basket Depth(s)	Did cement circulate (Y/ N) * Provide details below*
Conductor							
Surface							
Coal							
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production							
Tubing							
Packer type and depth set							

Comment Details _____

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft ³ /sks)	Volume (ft ³)	Cement Top (MD)	WOC (hrs)
Conductor							
Surface							
Coal							
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production							
Tubing							

Drillers TD (ft) _____ Loggers TD (ft) _____
 Deepest formation penetrated _____ Plug back to (ft) _____
 Plug back procedure _____

Kick off depth (ft) _____

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

Well cored Yes No Conventional Sidewall Were cuttings collected Yes No

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DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING _____

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WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS _____

WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS _____

WERE TRACERS USED Yes No TYPE OF TRACER(S) USED _____

Stage Number	Perforation Date	Top Perf Depth (ftKB)	Bottom Perf Depth (ftKB)	Number of Shots	Formation
	3/17/2019	11,024	11,105	0	MARCELLUS
	3/25/2019	10,835	11,006	40	MARCELLUS
	3/25/2019	10,625	10,806	40	MARCELLUS
	3/25/2019	10,425	10,606	40	MARCELLUS
	3/26/2019	10,225	10,406	40	MARCELLUS
	3/26/2019	10,025	10,206	40	MARCELLUS
	3/26/2019	9,825	10,006	40	MARCELLUS
	3/26/2019	9,625	9,806	40	MARCELLUS
	3/26/2019	9,425	9,606	40	MARCELLUS
	3/27/2019	9,225	9,406	40	MARCELLUS
	3/27/2019	9,025	9,206	40	MARCELLUS
	3/27/2019	8,825	9,006	40	MARCELLUS
	3/27/2019	8,625	8,806	40	MARCELLUS
	3/27/2019	8,425	8,606	40	MARCELLUS
	3/28/2019	8,225	8,406	40	MARCELLUS
	3/28/2019	8,025	8,206	40	MARCELLUS
	3/28/2019	7,825	8,006	40	MARCELLUS
	3/28/2019	7,625	7,806	40	MARCELLUS
	3/28/2019	7,425	7,606	40	MARCELLUS
	3/28/2019	7,225	7,406	40	MARCELLUS
	3/29/2019	7,225'	7,227'	0	MARCELLUS

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Stage Number	Stimulation Date	Ave Pump Rate (BPM)	Ave Treatment Pressure (PSI)	Max Breakdown Pressure (PSI)	ISIP (PSI)	Amount of Proppant (lbs)	Amount of Water (bbbls)	Amount of Nitrogen/other (units)
4	3/25/2019	95.52	8,935	9,281	4,623	237,900	5,915	0
5	3/25/2019	100.85	7,781	8,010	4,357	475,700	8,048	0
6	3/25/2019	100.40	7,313	8,661	4,596	475,300	7,999	0
7	3/26/2019	100.90	7,041	7,319	5,528	475,800	7,746	0
8	3/26/2019	101.36	7,143	7,501	4,912	474,880	9,226	0
9	3/26/2019	100.83	7,008	7,191	4,906	474,940	7,888	0
10	3/26/2019	101.43	6,953	7,244	4,834	475,300	7,805	0
11	3/26/2019	100.40	7,098	7,338	5,011	475,860	7,878	0
12	3/27/2019	100.80	7,317	7,646	5,554	475,700	7,924	0
13	3/27/2019	100.66	7,123	7,326	4,976	476,280	7,836	0
14	3/27/2019	101.13	7,539	7,869	4,973	474,500	8,460	0
15	3/27/2019	101.46	7,037	7,255	4,469	474,920	7,696	0
16	3/27/2019	100.40	6,982	7,424	5,002	475,200	7,877	0
17	3/28/2019	101.30	7,145	7,630	4,179	475,660	7,854	0
18	3/28/2019	100.90	6,730	7,023	5,155	475,660	7,767	0
19	3/28/2019	101.47	6,526	6,834	4,770	475,820	7,847	0
20	3/28/2019	101.26	6,596	7,006	4,525	475,260	7,779	0
21	3/28/2019	101.49	6,476	6,670	4,900	475,480	7,801	0
22	3/28/2019	101.30	6,813	7,401	4,832	475,120	7,610	0
23	3/29/2019	100.90	7,078	7,512	5,524	476,000	7,636	0
Kill Plug	3/29/2019	0	0	0	0	0	71	0

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Landing Point of Curve Northing 4,392,813 Easting 516,967
Bottom Hole Northing 4,394,050 Easting 516,539

Elevation (ft) GL Type of Well New Existing Type of Report Interim Final
Permit Type Deviated Horizontal Horizontal 6A Vertical Depth Type Deep Shallow
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Drilled with Cable Rotary

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

Mud Type(s) and Additive(s)

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Date permit issued 12/20/2018 Date drilling commenced 7/8/2014 Date drilling ceased 1/25/2015
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Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug

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

Reviewed by:

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

API 47-103-02950 County Wetzel District Proctor
Quad New Martinsville Pad Name Erlewine Field/Pool Name Mary
Farm name Erlewine, Richard Well Number #1H
Operator (as registered with the OOG) Stone Energy Corporation
Address 1300 Fort Pierpont Dr. - Suite 201 City Morgantown State WV Zip 26508

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 4,392,652 Easting 517,392
Landing Point of Curve Northing 4,392,831 Easting 516,960
Bottom Hole Northing 4,394,050 Easting 516,539

Elevation (ft) 1,212 GL Type of Well New Existing Type of Report Interim Final
Permit Type Deviated Horizontal Horizontal 6A Vertical Depth Type Deep Shallow
Type of Operation Convert Deepen Drill Plug Back Redrilling Rework Stimulate
Well Type Brine Disposal CBM Gas Oil Secondary Recovery Solution Mining Storage Other _____
Type of Completion Single Multiple Fluids Produced Brine Gas NGL Oil Other _____
Drilled with Cable Rotary

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

Mud Type(s) and Additive(s)
Saturated salt mud which includes Caustic Soda, Barite, Lime, New-Drill, Perma-Lose HT, Xan-Plex D, X-Cide 102, Soda Ash, and Sodium Chloride

Date permit issued 1/8/2014 Date drilling commenced 7/8/2014 Date drilling ceased 1/25/2015
Date completion activities began Not Yet Completed Date completion activities ceased Not Yet Completed
Verbal plugging (Y/N) N Date permission granted _____ Granted by _____

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Freshwater depth(s) ft 120 Open mine(s) (Y/N) depths N WV Department of Environmental Protection
Salt water depth(s) ft 1,694 Void(s) encountered (Y/N) depths N
Coal depth(s) ft 295, 493, 557 and 1,004 Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

Reviewed by: _____

API 47- 103 - 02950 Farm name Erlewine, Richard Well number #1H

CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade wt/ft	Basket Depth(s)	Did cement circulate (Y/ N) * Provide details below*
Conductor	24"	20"	90'	New	LS - 94.1 ppf		N - GTS
Surface	17.5"	13.375"	1,219' KB - 1,209' GL	New	J55 - 54.5 ppf	121' & 240'	Y - CTS
Coal	17.5"	13.375"	1,219' KB - 1,209' GL	New	J55 - 54.5 ppf	121' & 240'	Y - CTS
Intermediate 1	12.25"	9.625"	2,389'	New	J55 - 36 ppf		Y - CTS
Intermediate 2							
Intermediate 3							
Production	8.75"	5.5"	11,604'	New	P110 - 20 ppf		N - TOC @ 1,319' Calculated
Tubing							
Packer type and depth set		TAM CAP Inflatable Packer on 9.625" Casing String @ 1,083'					

Comment Details Circulated 30 bbls cement to surface on 13.375" casing string. Circulated 45 bbls cement to surface on the 9.625" casing string. Did not circulate any cement to surface on the 5.5" casing string. TOC on 5.5" calculated to be @ 1,319'.

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft ³ /sks)	Volume (ft ³)	Cement Top (MD)	WOC (hrs)
Conductor	Type 1	34	15.6	1.18	40	Surface	24.0
Surface	HalCem Class "A"	865	15.6	1.21	1,047	Surface	8.0
Coal	HalCem Class "A"	865	15.6	1.21	1,047	Surface	8.0
Intermediate 1	HalCem Class "A"	840	15.6	1.21	1,016	Surface	12.0
Intermediate 2							
Intermediate 3							
Production	Lead-Tuned Spacer3 Tail-VariCem	Lead-178 Tail-2,165	Lead-14.5 Tail-15.0	Lead-2.37 Tail-1.20	Lead-422 Tail-2,598	1,319' Calculated	7.0
Tubing							

Drillers TD (ft) 11,630 MD / 6,498 TVD Loggers TD (ft) N/A
 Deepest formation penetrated Marcellus Shale Plug back to (ft)
 Plug back procedure

Kick off depth (ft) 5,706 MD / 5,669 TVD

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

Well cored Yes No Conventional Sidewall Were cuttings collected Yes No

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING Surface casing had bow spring centralizers placed on joints 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29 and 31. Intermediate casing had bow spring centralizers placed on joints 2, 5, 8, 11, 14, 17, 20, 23, 26, 29, 33, 36, 39, 42, 45, 48, 51, 54 and 58. Production casing had rigid spiral centralizers placed on every third joint beginning with joint 1 to joint 139. Ran a total of 47 rigid spiral centralizers. Ran bow spring centralizers from joint 142 to joint 250 on every fourth joint. A total of 28 bow spring centralizers were run.

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WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS JUL - 3 2019

WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS WV Department of Environmental Protection

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

API 47- 103 - 02950

Farm name Erlewine, Richard

Well number #1H

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)

Please insert additional pages as applicable.

STIMULATION INFORMATION PER STAGE

Complete a separate record for each stimulation stage.

Stage No.	Stimulations Date	Ave Pump Rate (BPM)	Ave Treatment Pressure (PSI)	Max Breakdown Pressure (PSI)	ISIP (PSI)	Amount of Proppant (lbs)	Amount of Water (bbls)	Amount of Nitrogen/other (units)

Please insert additional pages as applicable.

API 47- 103 - 02950 Farm name Erlewine, Richard Well number #1H

<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>
<u>Not Yet Completed</u>	_____ TVD _____ MD
_____	_____
_____	_____
_____	_____

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface _____ psi Bottom Hole _____ psi DURATION OF TEST _____ hrs

OPEN FLOW Gas _____ mcfpd Oil _____ bpd NGL _____ bpd Water _____ bpd GAS MEASURED BY
 Estimated Orifice Pilot

LITHOLOGY/ FORMATION	TOP DEPTH IN FT NAME TVD	BOTTOM DEPTH IN FT TVD	TOP DEPTH IN FT MD	BOTTOM DEPTH IN FT MD	DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H ₂ S, ETC)
	0		0		
See Attached Sheet					
					RECEIVED Office of Oil and Gas

Please insert additional pages as applicable. JUL - 3 2019

Drilling Contractor Highlands (top-hole) & Saxon Drilling (horizontal)
Address 900 Virginia St. - East / 9303 New Trails Drive City Charleston / The Woodlands State WV / TX Zip 25301 / 77081

Logging Company Scientific Drilling and Schlumberger
Address 124 Vista Drive / 1178 US HWY 33 East City Charleroi / Weston State PA / WV Zip 15022 / 26452

Cementing Company Halliburton
Address 121 Champion Way, Suite 110 City Cannonsburg State PA Zip 15317

Stimulating Company _____
Address _____ City _____ State _____ Zip _____

Please insert additional pages as applicable.

Completed by W. Lee Hornsby Telephone 304-225-1600
Signature _____ Title Drilling Engineer Date 7/7/2014

Erlewine #1H
 API 47-103-02950
 Stone Energy Corporation

	Horizontal		Bottom (ft TVD)	Bottom (ft MD)	
	Top (ft TVD)	Top (ft MD)			
Sandstone & Shale	Surface	*	295		FW @ 120'
Coal	295	*	300		
Sandstone & Shale	300	*	493		
Coal	493	*	498		
Sandstone & Shale	498	*	557		
Coal	557	*	561		
Sandstone & Shale	561	*	1,004		
Coal	1,004	*	1,009		
Sandstone & Shale	1,009	*	2,014		SW @ 1,694'
Little Lime	2,014	*	2,044		
Big Lime	2,044	*	2,144		
Big Injun	2,144	*	2,244		
Sandstone & Shale	2,244	*	2,612		
Berea Sandstone	2,612	*	2,642		
Shale	2,642	*	2,857		
Gordon	2,857	*	2,907		
Undiff Devonian Shale	2,907	*	5,683	5,705	
Rhinestreet	5,683	5,705 ~	6,104	6,169	
Cashaqua	6,104	6,169 ~	6,340	6,567	
Middlesex	6,340	6,567 ~	6,353	6,596	
West River	6,353	6,596 ~	6,411	6,741	
Geneseo	6,411	6,741 ~	6,425	6,777	
Tully Limestone	6,425	6,777 ~	6,464	6,804	
Hamilton Shale	6,464	6,804 ~	6,502	7,091	
Marcellus	6,502	7,091 ~	6,498	11,630	
TD			6,498	11,630	

* From Pilot Hole Log and Driller's Log
 ~ From MWD Gamma Log

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End of Well Report

Erlewine 1H

Curve/Lateral

Saxon 141

Prepared By:

S.Rhodes

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- 2. Surveys**
- 3. Daily Drilling Reports**
- 4. BHA Summary Reports and Slide Sheets**
- 5. Graphical Job History**
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Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	3/25/2019
Job End Date:	3/29/2019
State:	West Virginia
County:	Wetzel
API Number:	47-103-02950-00-00
Operator Name:	EQT Production
Well Name and Number:	519186
Latitude:	39.68344600
Longitude:	-80.79736500
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	6.502
Total Base Water Volume (gal):	6,579,846
Total Base Non Water Volume:	0



Hydraulic Fracturing Fluid Composition:

Trade Name	Supplier	Purpose	Ingredients	Chemical Abstract Service Number (CAS #)	Maximum Ingredient Concentration in Additive (% by mass)**	Maximum Ingredient Concentration in HF Fluid (% by mass)**	Comments
Water	ProFrac	Carrier/Base Fluid	Water	7732-18-5	100.00000	85.44414	None
Sand (Proppant)	ProFrac	Proppant					
				Listed Below			

ProHib 100	ProFrac	Acid Corrosion Inhibitor											
					Listed Below								
StimStream SC-398	Chemstream	Scale Inhibitor											
					Listed Below								
Hydrochloric Acid (15%)	ProFrac	Acidizing											
					Listed Below								
Other Chemical (s)	Listed Above	See Trade Name (s) List											
					Listed Below								
StimStream FR 9800	Chemstream	Friction Reducer											
					Listed Below								
Clearal 268	Chemstream	Bacteria Treatment											
					Listed Below								
Items above are Trade Names with the exception of Base Water. Items below are the individual ingredients.													
			Silica Substrate		14808-60-7	100.00000	14.42713	None					
			Copolymer Of 2-Propenamide		Proprietary	30.00000	0.01444	None					
			Copolymer Of 2-Propenamide		Proprietary	30.00000	0.01444						
			Non-Hazardous Substances		Proprietary	90.00000	0.01253	None					
			Petroleum Dilillate		64742-47-8	20.00000	0.00962	None					
			Petroleum Dilillate		64742-47-8	20.00000	0.00962						
			Hydrochloric Acid		7647-01-0	15.00000	0.00861	None					

				Non-Hazardous Substances	Proprietary	90.00000	0.00824	
				Non-Hazardous Substances	Proprietary	90.00000	0.00824	None
				Glutaraldehyde	111-30-8	20.00000	0.00278	None
				Alcohols, C12-16, Ethoxylated	68551-12-2	2.00000	0.00096	None
				Oleic Acid Diethanolamide	93-83-4	2.00000	0.00096	None
				Oleic Acid Diethanolamide	93-83-4	2.00000	0.00096	
				Alcohols, C12-16, Ethoxylated	68551-12-2	2.00000	0.00096	
				Bis(HexaMethylene Triamine Penta (Methylene Phosphonic Acid) (BHMT)	34690-00-1	10.00000	0.00092	
				Bis(HexaMethylene Triamine Penta (Methylene Phosphonic Acid) (BHMT)	34690-00-1	10.00000	0.00092	None
				Ammonium Chloride ((NH4)Cl)	12125-02-9	1.00000	0.00048	None
				Ammonium Chloride ((NH4)Cl)	12125-02-9	1.00000	0.00048	
				Alkyl Dimethyl Benzyl Ammonium Chloride	68391-01-5	3.00000	0.00042	None
				Didecyl Dimethyl Ammonium Chloride	7173-51-5	3.00000	0.00042	None
				Methanol	67-56-1	90.00000	0.00011	
				Methanol	67-56-1	90.00000	0.00011	None
				Alcohols, C7-9-ISO, C8-Rich	68526-83-0	5.00000	0.00001	
				Isopropanol	67-63-0	5.00000	0.00001	None
				Imidazoline	61790-69-0	5.00000	0.00001	None
				Alcohols, C7-9-ISO, C8-Rich	68526-83-0	5.00000	0.00001	None
				Propargyl Alcohol	107-19-7	5.00000	0.00001	None
				Propargyl Alcohol	107-19-7	5.00000	0.00001	None

			Isopropanol	67-63-0	5.00000	0.00001	
			Xylene	1330-20-7	5.00000	0.00001	None
			Xylene	1330-20-7	5.00000	0.00001	
			Imidazoline	61790-69-0	5.00000	0.00001	
			Ethylbenzene	100-41-4	1.00000	0.00000	
			Ethylbenzene	100-41-4	1.00000	0.00000	None

* Total Water Volume sources may include various types of water including fresh water, produced water, and recycled water

** Information is based on the maximum potential for concentration and thus the total may be over 100%

*** If you are calculating a percentage of total ingredients do not add the water volume below the green line to the water volume above the green line

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

Well Operator's Report of Well Work



Well Number: Erlewine # 1H

API: 47 - 103 - 02950

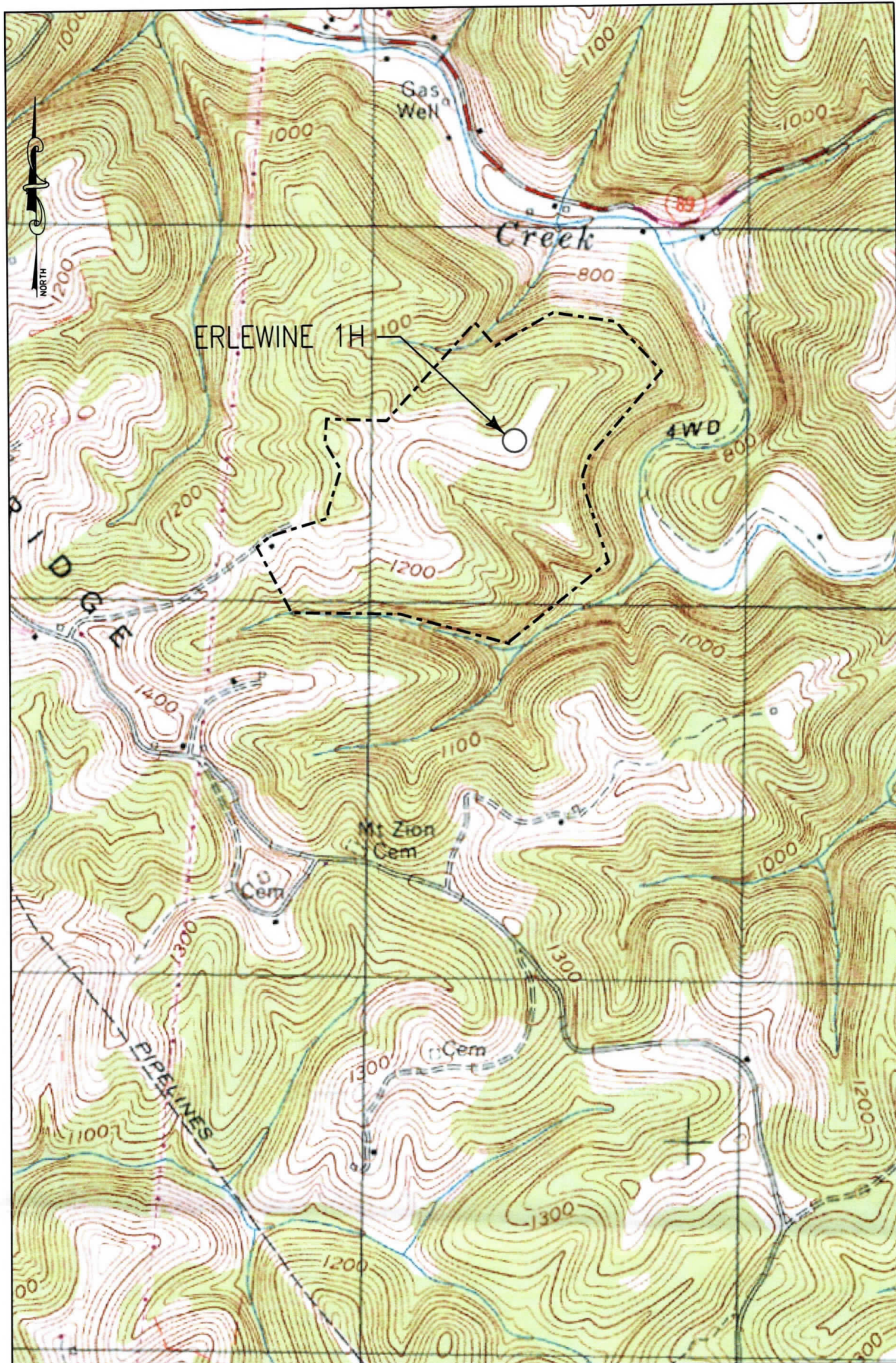
Submission: Initial Amended

Notes: Amended w/ Mylar plat

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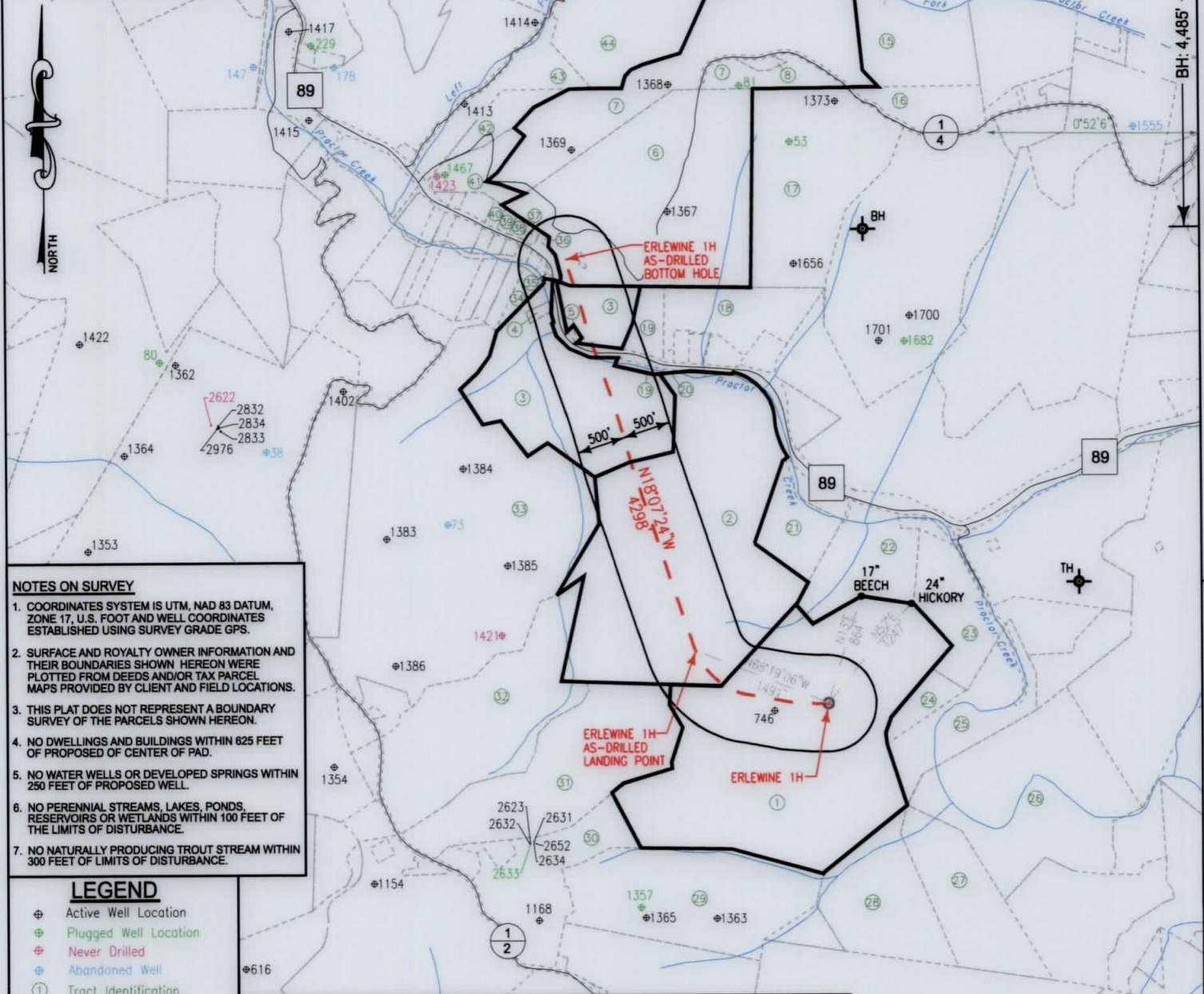


KEYSTONE CONSULTANTS, INC.
 32 EAST MAIN STREET,
 CARNEGIE, PA 15106
 412-278-2100

1" = 1000'
 NEW MARTINSVILLE 7.5'

EQT PRODUCTION COMPANY
 115 PROFESSIONAL PLACE
 PO BOX 280
 BRIDGEPORT, WV 26330

Erlewine 1H
Erlewine
EQT Production Company



- NOTES ON SURVEY**
- COORDINATES SYSTEM IS UTM, NAD 83 DATUM, ZONE 17, U.S. FOOT AND WELL COORDINATES ESTABLISHED USING SURVEY GRADE GPS.
 - SURFACE AND ROYALTY OWNER INFORMATION AND THEIR BOUNDARIES SHOWN HEREON WERE PLOTTED FROM DEEDS AND/OR TAX PARCEL MAPS PROVIDED BY CLIENT AND FIELD LOCATIONS.
 - THIS PLAT DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARCELS SHOWN HEREON.
 - NO DWELLINGS AND BUILDINGS WITHIN 625 FEET OF PROPOSED WELL.
 - NO WATER WELLS OR DEVELOPED SPRINGS WITHIN 250 FEET OF PROPOSED WELL.
 - NO PERENNIAL STREAMS, LAKES, PONDS, RESERVOIRS OR WETLANDS WITHIN 100 FEET OF THE LIMITS OF DISTURBANCE.
 - NO NATURALLY PRODUCING TROUT STREAM WITHIN 300 FEET OF LIMITS OF DISTURBANCE.

- LEGEND**
- ⊕ Active Well Location
 - ⊕ Plugged Well Location
 - ⊕ Never Drilled
 - ⊕ Abandoned Well
 - ① Tract Identification
 - Proposed Gas Well
 - Located Corner, as noted
 - - - Surface Tract Lines
 - Reference Line
 - Lease Boundary
 - Creek or Drain
 - ⊙ WV County Route
 - ⊙ WV State Route

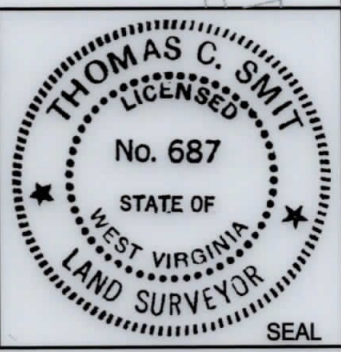
Tract ID.	Lease No.	Acres	Owner
1	873753	130.201343	Ronald Carney ET UX
2	873438	126.755241	Piney Holdings, Inc
3	873754	73.741558	George R. Baxter ET UX
6	873671	187.739475	Clarence W. Baxter ET UX

(⊕) Denotes Location of Well on United States Topographic Maps



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 Environmental Protection.

Thomas C. Smalls
L. L. S. 687



FILE NO: W2192 (BK 65-61)
DRAWING NO: _____
SCALE: 1" = 1600'
MINIMUM DEGREE OF ACCURACY: 1:2500
PROVEN SOURCE OF ELEVATION: NGS CORS Station

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

DATE: JUNE 25 20 19
OPERATORS WELL NO: ERLEWINE 1H
API WELL NO: 47 - 103 - 02950
STATE COUNTY PERMIT

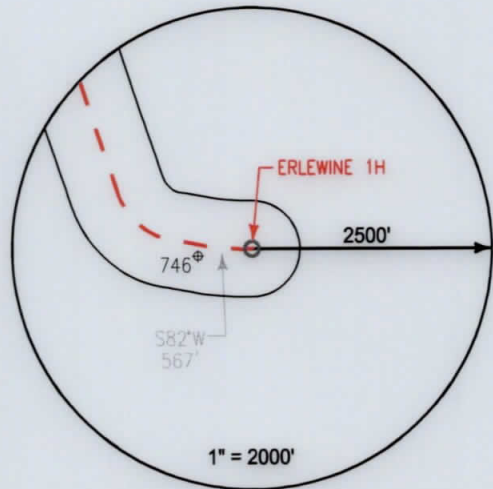
WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
(IF GAS) PRODUCTION: STORAGE DEEP SHALLOW
LOCATION ELEVATION: 1,220' WATERSHED: TRIBUTARY OF PROCTOR CREEK QUADRANGLE: NEW MARTINSVILLE 7.5'
DISTRICT: Proctor COUNTY: Wetzel
SURFACE OWNER: Richard Erlewine ACREAGE: 135 ±
ROYALTY OWNER: Ronald Carney, et ux LEASE NO: 873753 ACREAGE: 130.20 ±
PROPOSED WORK: DRILL CONVERT DRILL DEEPER 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: Marcellus ESTIMATED DEPTH: 6,750'

WELL OPERATOR: EQT Production Company DESIGNATED AGENT: Jason Ranson
ADDRESS: 115 Professional Place PO Box 280 ADDRESS: 115 Professional Place PO Box 280
Bridgeport, WV 26330 Bridgeport, WV 26330

TOPHOLE AS-DRILLED

**Erlwine 1H
Erlwine
EQT Production Company**

Tract ID.	Tax Map No.	Parcel No.	County	District	Surface Tract Owner	Acres
1	6	46	Wetzel	Proctor	Richard L. Erlwine	136.18
2	6	36	Wetzel	Proctor	Richard L. Erlwine	127.14
3	6	24	Wetzel	Proctor	George R. Baxter	83.92
4	6	24.1	Wetzel	Proctor	Robert Lee Sandridge	0.66
5	6	25	Wetzel	Proctor	Williams Ohio Valley	0.32
6	6	6	Wetzel	Proctor	Baxter Farm LLC	88.5
7	1	32	Wetzel	Proctor	Baxter Farm LLC	76.67
8	1	33	Wetzel	Proctor	William & Christina Wilkinson	0.99
9	1	29	Wetzel	Proctor	Baxter Farm LLC	2.11
10	1	N/A	Wetzel	Proctor	N/A	1.45
11	1	30	Wetzel	Proctor	Proctor Creek School	0.66
12	1	31	Wetzel	Proctor	Steven Jack & Susan Hafer	19.08
13	1	20	Wetzel	Proctor	Charles E. Frohnappel	124.67
14	1	34.1	Wetzel	Proctor	Herbert & Virginia Parsons	2.42
15	1	34	Wetzel	Proctor	Ronald J. & Linda Petrecca	29.06
16	6	52	Wetzel	Proctor	Ronald J. & Linda Petrecca	11.23
17	6	7.3	Wetzel	Proctor	Austin & Marlene Postlethwait	54.57
18	6	26.3	Wetzel	Proctor	Michael G. & Kathleen F. Baxter	18.7
19	6	26	Wetzel	Proctor	Larry K. Keene	6.26
20	6	26.4	Wetzel	Proctor	Larry K. Keene	0.44
21	6	38	Wetzel	Proctor	Ethel Anderson EST	12.56
22	6	30	Wetzel	Proctor	Albert Ray Anderson	102.63
23	6	40	Wetzel	Proctor	Kevin S. Goff	19.13
24	6	47	Wetzel	Proctor	Victor Richard Reed ET AL	5.55
25	7	34	Wetzel	Proctor	Kevin Goff	23.31
26	7	37	Wetzel	Proctor	Rost Energy Company	64.56
27	12	1	Wetzel	Proctor	Kevin Goff	28.69
28	11	5	Wetzel	Proctor	Emma L. & John J. Moore	30.34
29	11	3	Wetzel	Proctor	Christy Leek & Mary Wilson EST	52.33
30	6	45	Wetzel	Proctor	Christy Leek	29.51
31	6	45.1	Wetzel	Proctor	Donald F. & Martha J. Arrick	53.9
32	6	35	Wetzel	Proctor	Donald F. & Martha J. Arrick	58.96
33	6	23	Wetzel	Proctor	George Lemoyne Horner & Joseph Lemoyne Horner	156.55
34	6A	11	Wetzel	Proctor	Robert L. & Mary E. Stillwagner	2.38
35	6	18	Wetzel	Proctor	Douglas Farrow	0.16
36	6A	11.2	Wetzel	Proctor	Robert L. & Mary Ellen Stillwagner	0.32
37	6A	10	Wetzel	Proctor	Jay Edward & Kathleen S. Smith	3.33
38	6A	9	Wetzel	Proctor	Joyce Kay Morris	3.47
39	6A	8	Wetzel	Proctor	Candis Darlene Clark	3.67
40	6A	7	Wetzel	Proctor	Janice Capobianco	8.42
41	6	5	Wetzel	Proctor	Steven & Susan Louise Hafer	8.68
42	6	4	Wetzel	Proctor	Steven J. Hafer	6.91
43	1	27	Wetzel	Proctor	Steven J. Hafer	79.29
44	1	28	Wetzel	Proctor	Floyd R. & Mitzie Lou Cecil	87.73



Notes:
ERLEWINE 1H As-Drilled coordinates are
 NAD 27 N: 433,674.003 E: 1,634,878.000
 NAD 27 Lat: 39.684902 Long: -80.797365
 NAD 83 UTM N: 4,392,652.021 E: 517,392.092

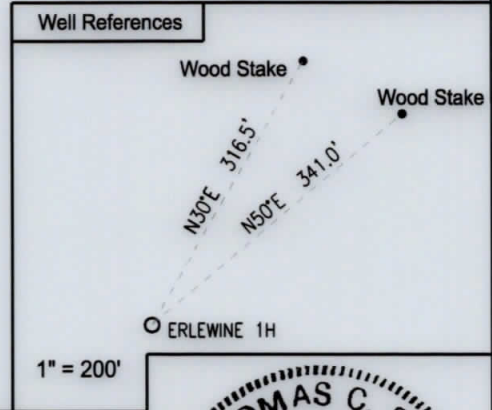
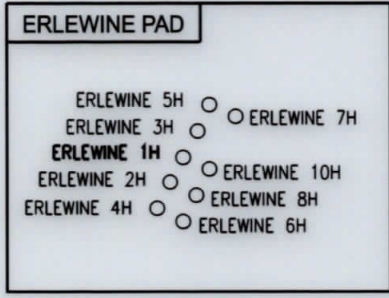
ERLEWINE 1H As-Drilled Landing Point coordinates are
 NAD 27 N: 434,224.703 E: 1,633,492.930
 NAD 27 Lat: 39.684902 Long: -80.802315
 NAD 83 UTM N: 4,392,812.738 E: 516,967.321

ERLEWINE 1H As-Drilled Bottom Hole coordinates are
 NAD 27 N: 438,308.783 E: 1,632,156.070
 NAD 27 Lat: 39.696061 Long: -80.807275
 NAD 83 UTM N: 4,394,050.172 E: 516,539.299

West Virginia Coordinates system of 1927 (North Zone)
 based upon Differential GPS Measurements
 Plat orientation, Corner and well ties are based upon
 the grid north meridian
 Well location references are based upon the grid north
 meridian.
 UTM coordinates are NAD83, Zone 17, Meters.

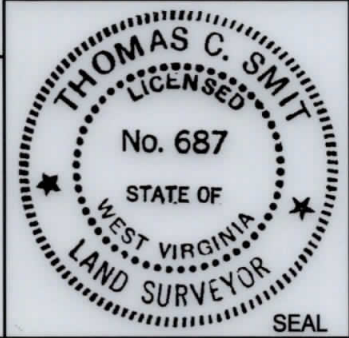
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