

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

RECEIVED
Office Of Oil and Gas

NOV 12 2024

WV Department of
Environmental Protection

API 47 - 051 - 02279 County Marshall District Meade
Quad Glen Easton 7.5' Pad Name KNOB CREEK Field/Pool Name N/A
Farm name David Lee Franklin Well Number Knob Creek N-2HM (L027468)
Operator (as registered with the OOG) EQT Production Company
Address 400 Woodcliff Drive City Canonsburg State PA Zip 15317

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 4,402,272.33 Easting 525,217.50
Landing Point of Curve Northing 4,402,481.4 Easting 524,922.7
Bottom Hole Northing 4,406,404.3 Easting 522,638.3

Elevation (ft) 737' 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)

Synthetic Oil Based Mud 14.12 ppg barium sulfate, sodium chloride, xanthan gum, polyanionic cellulose, modified starch, sodium hydroxide, phosphonates and alkyl phosphates, glutaraldehyde solution, calcium hydroxide, partially hydrolyzed polyacrylamide/polyacrylate, potassium chloride, sodium carbonate, ground walnut shells, alcohol and modified fatty acid, ferrochrome lignosulfonate, calcium carbonate, fibrous cellulose

Date permit issued 12/03/2019 Date drilling commenced 08/03/2020 Date drilling ceased 12/21/2023
Date completion activities began 05/05/2024 Date completion activities ceased 08/13/2024
Verbal plugging (Y/N) N Date permission granted N/A Granted by N/A

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

APPROVED

Freshwater depth(s) ft 380' Open mine(s) (Y/N) depths N
Salt water depth(s) ft 885' Void(s) encountered (Y/N) depths N
Coal depth(s) ft 292', 374' Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

Reviewed by:

SG
02/07/2025
SIRADON
12/23/2024

WR-35
Rev. 8/23/13

API 47-051 - 02279 Farm name David Lee Franklin Well number Knob Creek N-2HM (L027468)

CASING STRINGS	Hole Size	Casing Size	Depth (GL)	New or Used	Grade wt/ft	Basket Depth(s) (GL)	Did cement circulate (Y/N) * Provide details below*
Conductor	38"	30"	120'	NEW	118.65#	N/A	Y
Surface	17-1/2"	13-3/8"	489'	NEW	J-55 54.5#	N/A	Y
Coal							
Intermediate 1	12-1/4"	9-5/8"	2343'	NEW	J-55 36#	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-3/4", 8-1/2"	5-1/2"	21,634'	NEW	P-110 20#	N/A	N
Tubing							
Packer type and depth set							

Comment Details Production Cement job has a calculated TOC of 882' GL, which is greater than 500' TVD above the producing formation. No issues during cement job.

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft ³ /sks)	Volume (ft ³)	Cement Top (GL)	WOC (hrs)
Conductor	CLASS A	329	15.6	1.21	398	0	8+
Surface	CLASS A	704	15.6	1.18	830	0	8
Coal							
Intermediate 1	CLASS A	792	15.6	1.18	934	0	8
Intermediate 2							
Intermediate 3							
Production	CLASS A	4088	15.0	1.18	4824	882'	8+
Tubing							

Drillers TD (ft) 21,648' Loggers TD (ft) N/A
 Deepest formation penetrated MARCELLUS Plug back to (ft) N/A
 Plug back procedure N/A

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Kick off depth (ft) 1394'

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

Well cored Yes No Conventional Sidewall Were cuttings collected Yes No

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING _____
 CONDUCTOR- NONE _____
 SURFACE- ON SHOE TRACK AND EVERY 500' TO SURFACE _____
 INTERMEDIATE: ON SHOE TRACK AND EVERY 500' FEET TO SURFACE _____
 PRODUCTION: ON SHOE TRACK AND EVERY OTHER JOINT TO 51' _____

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 _____

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<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>
<u>Marcellus</u>	<u>6,169-6,199</u> TVD <u>6,411-21,648</u> MD
_____	_____
_____	_____
_____	_____

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface 2993 psi Bottom Hole _____ psi DURATION OF TEST 24 hrs

OPEN FLOW Gas 8794 mcfpd Oil 469 bpd NGL 0 bpd Water 294 bpd GAS MEASURED BY Estimated Orifice Pilot

LITHOLOGY/ FORMATION	TOP	BOTTOM	TOP	BOTTOM	DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H ₂ S, ETC)
	DEPTH IN FT NAME TVD	DEPTH IN FT TVD	DEPTH IN FT MD	DEPTH IN FT MD	
	<u>0</u>		<u>0</u>		

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Please insert additional pages as applicable.

Drilling Contractor Patterson UTI (294)
Address 207 Carlton Drive City Eighty Four State PA Zip 15330

Logging Company Baker Hughes
Address 400 Technology Dr Suite 100 City Canonsburg State PA Zip 15317

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

Cementing Company American Cementing
Address 603 US Highway 19 N City Weston State WV Zip 26452

Please insert additional pages as applicable.

Completed by Jacob Caplan Telephone 412-215-2723
Signature [Signature] Title Mgr Completions Engr Date 2024-11-07

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Rev. 8/23/13

API 47- 051 - 02279 Farm name David Lee Franklin Well number Knob Creek N-2HM (L027468)

Drilling Contractor Falcon (Rig 24)
Address 1120 US-119 City Indiana State PA Zip 15701

Logging Company Nzone Guidance, LLC
Address 140 Falcon Lane City Liberty Hill State TX Zip 78642

Logging Company _____
Address _____ City _____ State _____ Zip _____

Drilling Contractor _____
Address _____ City _____ State _____ Zip _____

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Well # KNOB CREEK N-2HM (L027468) Final Formations API# 47-051-02279				
Formation Name	Drill Top MD (ftGRD)	Drill Top (TVD) (ftGRD)	Drill Btm MD (ftGRD)	Drill Btm (TVD) (ftGRD)
Sand/Shale	1	1	292	292
Sewickley Coal	292	292	294	294
Sand/Shale	294	294	374	374
Pittsburgh Coal	374	374	380	380
Sand/Shale	380	380	1,509	1,509
Big Lime	1,509	1,509	1,711	1,711
Big Injun	1,711	1,711	1,740	1,740
Sand/Shale	1,740	1,740	2,095	2,094
Berea	2,095	2,094	2,357	2,355
Sand/Shale	2,357	2,355	2,359	2,357
Gordon	2,359	2,357	2,437	2,435
50F	2,437	2,435	2,508	2,506
Sand/Shale	2,508	2,506	3,008	3,004
Speechley	3,008	3,004	4,852	4,840
Alexander	4,852	4,840	5,302	5,274
Elks	5,302	5,274	5,941	5,879
Sonyea	5,941	5,879	6,035	5,960
Middlesex	6,035	5,960	6,069	5,987
Genesee	6,069	5,987	6,126	6,029
Geneseo	6,126	6,029	6,172	6,060
Tully	6,172	6,060	6,221	6,089
Hamilton	6,221	6,089	6,411	6,169
Marcellus	6,411	6,169	21,648	6,199

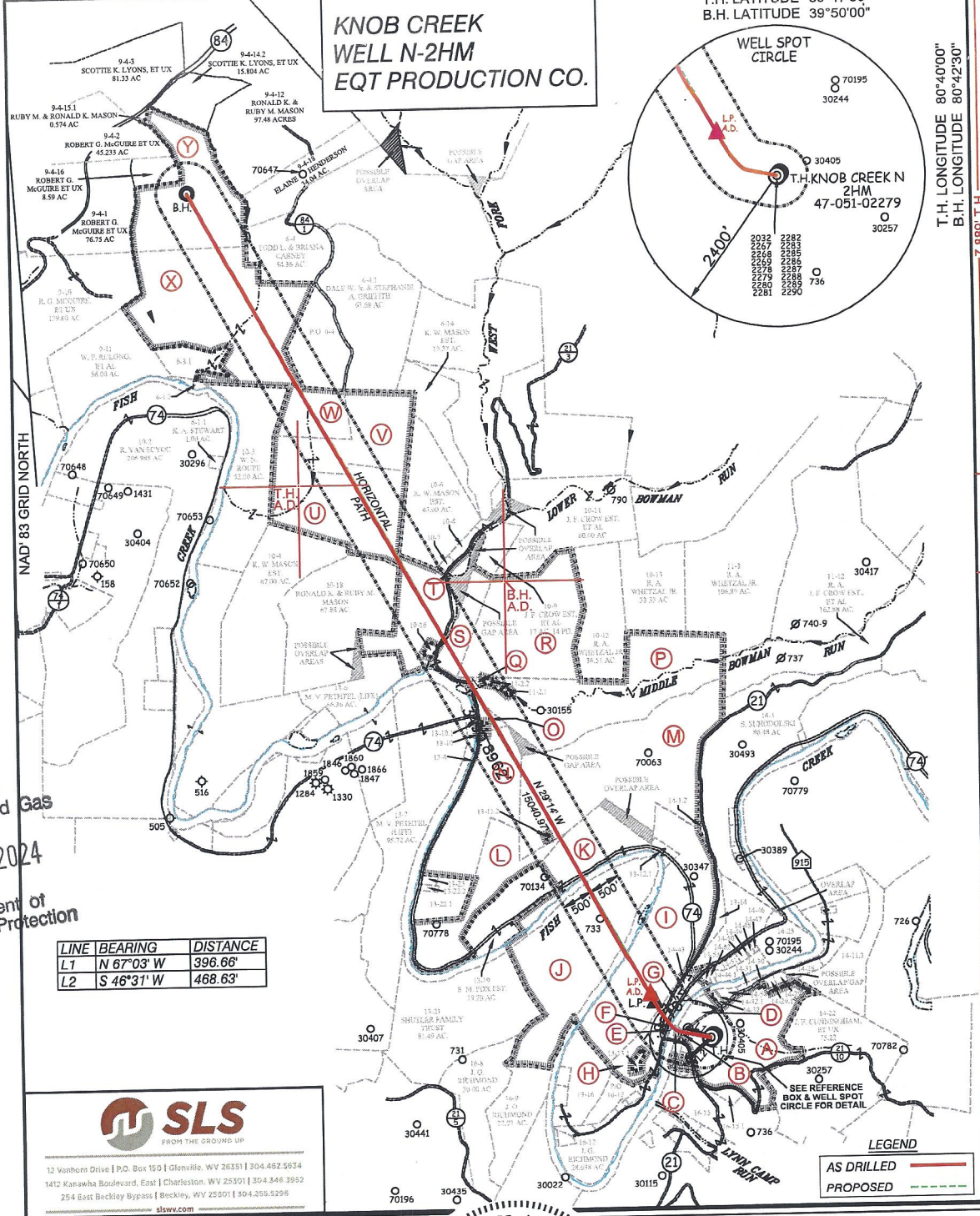
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**Knob Creek Well N-2HM
EQT Production Co.**

T.H. LATITUDE 39°47'30"
B.H. LATITUDE 39°50'00"

T.H. LONGITUDE 80°40'00"
B.H. LONGITUDE 80°42'30"



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LINE	BEARING	DISTANCE
L1	N 67°03' W	396.66'
L2	S 46°31' W	468.63'

SLS
FROM THE GROUND UP

12 Vanhorn Drive | P.O. Box 150 | Glenville, WV 26031 | 304.482.5034
1412 Kanawha Boulevard, East | Charleston, WV 25301 | 304.346.3952
254 East Beckley Bypass | Beckley, WV 25801 | 304.255.5295
slswv.com

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

NAD83 S.P.C.(FT)	N. 464,849.78	E. 1,829,845.60
NAD83 GEO.	LAT-(N) 39.770008	LONG-(W) 80.705559
NAD83 UTM (M)	N. 4,402,272.33	E. 525,217.50

LANDING POINT

NAD83 S.P.C.(FT)	N. 485,427.6	E. 1,628,758.1
NAD83 GEO.	LAT-(N) 39.771562	LONG-(W) 80.708744
NAD83 UTM (M)	N. 4,402,443.8	E. 524,944.2

BOTTOM HOLE

NAD83 S.P.C.(FT)	N. 478,552.9	E. 1,621,412.6
NAD83 GEO.	LAT-(N) 39.807317	LONG-(W) 80.735517
NAD83 UTM (M)	N. 4,406,405.2	E. 522,639.5

GREGORY A. SMITH
LICENSED
No. 677
STATE OF
WEST VIRGINIA
PROFESSIONAL SURVEYOR

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.

P.S.
677 *Gregory A. Smith*

SCALE 1" = 2000' FILE NO. 8789-EQT-KG-2HM-Asdrilled-122923-MJH

DATE NOVEMBER 20, 2023
REVISED DECEMBER 29, 2023

OPERATORS WELL NO. Knob Creek N 2HM
API WELL 47-051-02279
NO. STATE COUNTY PERMIT

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

LEGEND

- LEASE LINE
- SURFACE LINE
- WELL LATERAL
- OFFSET LINE
- OFF LINE
- TIE LINE
- CREEK
- ROAD
- COUNTY ROUTE
- PROPOSED WELL
- EXISTING WELL
- PERMITTED WELL
- TAX MAP-PARCEL
- SURFACE OWNER (SEE TABLE)
- LEASE # (SEE WW-8A1)

WELL OPERATOR EQT PRODUCTION COMPANY DESIGNATED AGENT JOSEPH C. MALLOW
ADDRESS 400 WOODCLIFF DRIVE ADDRESS 427 MIDSTATE DRIVE
CANONSBURG, PA 15317 CLARKSBURG, WV 26301

02/07/2025

Knob Creek Well N-2HM
EQT PRODUCTION CO.

TAG	SURFACE OWNER	PARCEL	ACRES
A	DAVID L. & LINDA L. FRANKLIN	9-14-33	65.824
B	MARGARET FOX - LIFE	9-14-39	0.19
C	MARGARET FOX - LIFE	9-14-41	0.21
D	DAVID L. & LINDA L. FRANKLIN	9-14-44	2.913
E	STATE OF WEST VIRGINIA (FISH CREEK)	N/A	N/A
F	JOHN C. LAGOS, ET UX	9-14-42	1.87
G	MARGARET FOX - LIFE	9-14-46	18.88
H	MARGARET FOX - LIFE	9-13-13	15.513
I	ANDREW I. FROHNAPFEL	9-13-12	91.1007
J	DANIEL JAY FITZWATER	9-13-20	105.5
K	ELEANOR M. FOX EST.	9-13-18	30.00
L	XCL MIDSTREAM OPERATING LL C	9-13-22	42.27
M	KENNETH & TERESA A. SMERTNECK	9-13-11	112.67

T.H. LATITUDE 39°47'30"
 B.H. LATITUDE 39°50'00"

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

NAD'83 S.P.C.(FT)	N. 464,849.78	E. 1,629,645.60
NAD'83 GEO.	LAT-(N) 39.770008	LONG-(W) 80.705559
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AS DRILLED COORDINATES FOR WELL NO. N-2HM

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

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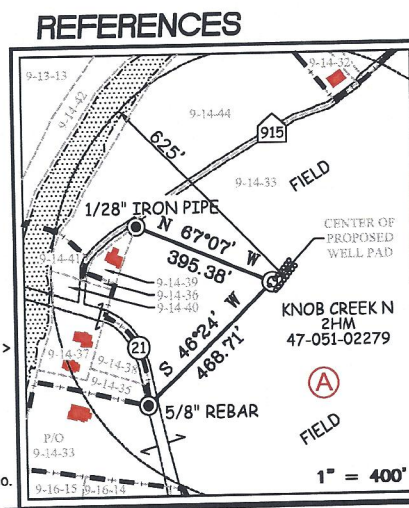
LANDING POINT

NAD'83 S.P.C.(FT)	N. 468,552.2	E. 1,628,689.7
NAD'83 GEO.	LAT-(N) 39.771901	LONG-(W) 80.708993
NAD'83 UTM (M)	N. 4,402,481.4	E. 524,922.7

BOTTOM HOLE

NAD'83 S.P.C.(FT)	N. 478,550.1	E. 1,621,408.5
NAD'83 GEO.	LAT-(N) 39.807309	LONG-(W) 80.735532
NAD'83 UTM (M)	N. 4,406,404.3	E. 522,638.3

N	SHUTLER FAMILY TRUST	9-13-8	56.04
O	ARTHUR L. MOORE	9-13-10	3.96
P	MARGARET K. FOX - LIFE	9-11-2	84.378
Q	GERALD F. PADLOW, ET UX	9-11-1	1.033
R	RAY A. WHETZEL, JR., ET AL	9-10-13	71.11
S	WILLIAM MCCONNELL	9-10-14	15.00
T	JOSEPH MICHAEL BONENE	9-10-15	44.00
U	KENNETH W. MASON EST.	9-10-5	51.62
V	J. F. CROW ESTATE, ET AL	9-6-15	55.23
W	TODD L. CARNEY	9-6-16	23.05
X	WILLIAM N. ROUPE	9-6-3	110.09
Y	MICHAEL E. McCARDLE, ET UX	9-4-17	65.791



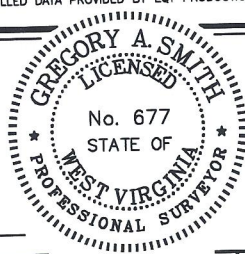
NOTES ON SURVEY

- NO WATER WELLS WERE FOUND WITHIN 250' OF PROPOSED GAS WELL. NO AGRICULTURAL BUILDINGS > 2500 SQ. FT. WERE FOUND WITHIN 625' OF THE CENTER OF PROPOSED WELL PAD.
- SEE REFERENCES FOR DWELLINGS LOCATED WITHIN 825' OF THE CENTER OF PROPOSED WELL PAD.
- WELL SPOT CIRCLE & TOPO MARK SCALE IS 1"=2000'.
- BASED ON WV DOT COUNTY ROUTE 74 IS A 40' STRIP OF LAND ACQUIRED IN NUMEROUS DEEDS.
- PLAT UPDATED TO SHOW AS-DRILLED PATH. AS-DRILLED DATA PROVIDED BY EQT PRODUCTION CO.

12 Vanborn Drive | P.O. Box 150 | Glenview, WV 26031 | 304.482.6634
 1412 Kanawha Boulevard, East | Charleston, WV 25301 | 304.346.3952
 254 East Beckley Bypass | Beckley, WV 25801 | 304.356.5296
 slsw.com

I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DIVISION OF ENVIRONMENTAL PROTECTION.

P.S. Gregory A. Smith
 677



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.

DATE NOVEMBER 20, 20 23

REVISED DECEMBER 29, 2023

OPERATORS WELL NO. Knob Creek N-2HM

API WELL NO. 47-051-02279

STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1/2500 FILE NO. 8789-EQT-KC-2HM-Asdrilled-122923-MJH dwg

HORIZONTAL & VERTICAL CONTROL DETERMINED BY DGPS (SURVEY GRADE TIE TO CORS NETWORK) SCALE 1" = 2000'

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

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

LOCATION: ELEVATION 737.50' WATERSHED FISH CREEK (HUC 10)

DISTRICT MEADE COUNTY MARSHALL QUADRANGLE GLEN EASTON 7.5'

SURFACE OWNER DAVID L. & LINDA L. FRANKLIN ACREAGE 65.824±

ROYALTY OWNER DAVID LEE FRANKLIN, ET AL - SEE WW-6A1 ACREAGE 65.824±

PROPOSED WORK: DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION PLUG AND ABANDON CLEAN OUT AND REPLUG OTHER

PHYSICAL CHANGE IN WELL (SPECIFY) _____ TARGET FORMATION MARCELLUS

ESTIMATED DEPTH TVD: 6,198' / TMD: 21,636'

WELL OPERATOR EQT PRODUCTION COMPANY DESIGNATED AGENT JOSEPH C. MALLOW

ADDRESS 400 WOODCLIFF DRIVE ADDRESS 427 MIDSTATE DRIVE

CANONSBURG, PA 15317 CLARKSBURG, WV 26301

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Perforation Data

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Stage No.	Perforation Date	Stage Perforated From TMD Ft.	Stage Perforated To TMD Ft.	# of Perforations/Stage	Formation(s)
2	05/05/2024	21537	21388	48	Marcellus
3	05/07/2024	21359	21210	48	Marcellus
4	05/07/2024	21181	21031	48	Marcellus
5	05/08/2024	21003	20853	48	Marcellus
6	05/09/2024	20824	20675	48	Marcellus
7	05/09/2024	20646	20497	48	Marcellus
8	05/09/2024	20468	20319	48	Marcellus
9	05/10/2024	20290	20140	48	Marcellus
10	05/10/2024	20112	19962	48	Marcellus
11	05/11/2024	19933	19784	48	Marcellus
12	05/11/2024	19755	19606	48	Marcellus
13	05/11/2024	19577	19428	48	Marcellus
14	05/12/2024	19399	19249	48	Marcellus
15	05/12/2024	19221	19071	48	Marcellus
16	05/13/2024	19042	18893	48	Marcellus
17	05/14/2024	18864	18715	48	Marcellus
18	05/14/2024	18686	18537	48	Marcellus
19	05/15/2024	18508	18358	48	Marcellus
20	05/15/2024	18330	18180	48	Marcellus
21	05/16/2024	18151	18002	48	Marcellus
22	05/17/2024	17973	17824	48	Marcellus
23	05/20/2024	17795	17646	48	Marcellus
24	05/20/2024	17617	17467	48	Marcellus
25	05/20/2024	17445	17285	36	Marcellus
26	05/21/2024	17260	17111	24	Marcellus
27	05/23/2024	17082	16933	48	Marcellus
28	05/24/2024	16904	16755	48	Marcellus
29	05/24/2024	16732	16572	36	Marcellus
30	05/25/2024	16548	16398	48	Marcellus
31	05/25/2024	16369	16220	48	Marcellus
32	05/26/2024	16197	16038	36	Marcellus
33	05/27/2024	16013	15864	48	Marcellus
34	05/27/2024	15835	15685	48	Marcellus
35	05/28/2024	15663	15503	36	Marcellus
36	05/28/2024	15478	15329	48	Marcellus
37	05/28/2024	15300	15151	48	Marcellus
38	05/29/2024	15128	14969	36	Marcellus
39	05/29/2024	14944	14794	48	Marcellus
40	05/30/2024	14766	14616	48	Marcellus
41	05/30/2024	14587	14438	48	Marcellus
42	05/30/2024	14409	14260	48	Marcellus

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43	05/31/2024	14231	14082	48	Marcellus
44	05/31/2024	14053	13903	48	Marcellus
45	06/01/2024	13875	13725	48	Marcellus
46	06/01/2024	13696	13547	48	Marcellus
47	06/02/2024	13518	13369	48	Marcellus
48	06/02/2024	13340	13191	48	Marcellus
49	06/03/2024	13162	13012	48	Marcellus
50	06/03/2024	12984	12834	48	Marcellus
51	06/03/2024	12805	12656	48	Marcellus
52	06/04/2024	12627	12478	48	Marcellus
53	06/05/2024	12449	12300	48	Marcellus
54	06/05/2024	12271	12121	48	Marcellus
55	06/05/2024	12093	11943	48	Marcellus
56	06/05/2024	11914	11765	48	Marcellus
57	06/05/2024	11736	11587	48	Marcellus
58	06/06/2024	11558	11409	48	Marcellus
59	06/06/2024	11380	11230	48	Marcellus
60	06/06/2024	11202	11052	48	Marcellus
61	06/06/2024	11023	10874	48	Marcellus
62	06/07/2024	10845	10696	48	Marcellus
63	06/07/2024	10667	10518	48	Marcellus
64	06/07/2024	10489	10339	48	Marcellus
65	06/07/2024	10311	10161	48	Marcellus
66	06/07/2024	10132	9983	48	Marcellus
67	06/08/2024	9954	9805	48	Marcellus
68	06/08/2024	9776	9627	48	Marcellus
69	06/08/2024	9598	9448	48	Marcellus
70	06/09/2024	9420	9270	48	Marcellus
71	06/09/2024	9241	9092	48	Marcellus
72	06/10/2024	9063	8914	48	Marcellus
73	06/10/2024	8885	8736	48	Marcellus
74	06/11/2024	8707	8557	48	Marcellus
75	06/11/2024	8529	8379	48	Marcellus
76	06/12/2024	8350	8201	48	Marcellus
77	06/12/2024	8172	8023	48	Marcellus
78	06/12/2024	7994	7845	48	Marcellus
79	06/12/2024	7816	7666	48	Marcellus
80	06/13/2024	7638	7488	48	Marcellus
81	06/13/2024	7459	7310	48	Marcellus
82	06/13/2024	7281	7132	48	Marcellus
83	06/14/2024	7103	6954	48	Marcellus
84	06/15/2024	6925	6775	48	Marcellus
85	06/15/2024	6747	6597	48	Marcellus

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WV Department of
Environmental Protection

02/07/2025

Stimulation Data

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Environmental Protection

02/07/2025

Stage #	Stimulation Date	Ave Pump Rate (BPM)	Ave Treatment Pressure (PSI)	Max Breakdown Pressure (PSI)	ISIP (PSI)	Amount of Proppant (lbs)	Amount of Water (bbls)	Amount of Nitrogen/other (units)
1	05/05/2024	91	8665	8829	3497	288260	7908.02	
2	05/06/2024	94	8916	8824	4289	450602	9304.79	
3	05/07/2024	99	8804	8457	4668	450378	9212.62	
4	05/08/2024	90	8894	8633	5151	449602	9113.76	
5	05/09/2024	94	8885	8881	4968	450020	9112.24	
6	05/09/2024	99	8918	8524	4822	453368	9164.76	
7	05/09/2024	99	8812	8495	5117	449487	9055.10	
8	05/10/2024	97	8833	8979	4800	450024	9522.26	
9	05/10/2024	86	8367	7813	4318	454377	9926.62	
10	05/11/2024	100	8697	8337	4920	450050	9707.43	
11	05/11/2024	100	8583	7517	5153	450018	9412.12	
12	05/12/2024	100	8644	8558	5111	449840	9124.21	
13	05/12/2024	100	8572	0	4975	449940	9105.86	
14	05/12/2024	100	8624	8586	5163	449605	9094.19	
15	05/13/2024	100	8649	0	4100	450520	9095.40	
16	05/14/2024	100	8471	0	5010	450916	9208.60	
17	05/14/2024	99	8661	8929	4962	449424	9081.93	
18	05/15/2024	99	8365	0	4884	450440	9054.52	
19	05/15/2024	100	8397	8792	5098	450057	9019.93	
20	05/16/2024	99	8340	8654	4810	450080	9007.19	
21	05/17/2024	100	8638	0	5043	450180	9031.71	
22	05/20/2024	100	8274	0	5300	449960	9075.43	
23	05/20/2024	100	8102	8850	4600	449445	9179.45	
24	05/21/2024	77	8623	0	4832	449487	8706.10	
25	05/21/2024	95	8816	0	4239	451960	8898.31	
26	05/23/2024	14	8568	8955	5750	16870	3286.64	
27	05/24/2024	100	8423	8622	4467	452020	9078.12	
28	05/24/2024	99	8663	8660	4248	450383	8987.74	
29	05/25/2024	98	8700	8983	4873	450921	8893.36	
30	05/25/2024	100	8584	8989	4611	399800	8998.88	
31	05/26/2024	99	8287	9036	5629	450621	10439.29	
32	05/27/2024	85	8777	9065	4334	451540	9162.93	
33	05/27/2024	100	8460	8440	4620	450412	9052.48	
34	05/28/2024	99	8655	8644	4532	450660	8947.17	
35	05/28/2024	98	8372	0	5300	450160	8960.69	
36	05/28/2024	100	8061	0	5000	450400	8796.26	
37	05/29/2024	100	8433	8621	4782	451215	9121.62	
38	05/29/2024	98	8805	0	4995	449960	9095.07	
39	05/30/2024	100	7978	8429	5237	451100	8917.00	
40	05/30/2024	100	8003	0	5300	449960	8905.76	
41	05/30/2024	100	8104	8771	4985	449780	8864.88	

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42	05/31/2024	100	7974	8672	5161	451280	8824.14
43	05/31/2024	99	7926	8960	4976	449820	8907.26
44	06/01/2024	100	7816	0	5055	450000	8902.76
45	06/02/2024	100	7744	8631	5026	450520	8847.86
46	06/02/2024	100	7955	8836	5000	450300	8859.90
47	06/02/2024	100	7817	0	4805	451280	8882.60
48	06/03/2024	100	7777	8702	5261	450420	8800.79
49	06/03/2024	98	7728	8262	5190	451820	8849.64
50	06/04/2024	100	7968	8790	5062	449920	8844.48
51	06/04/2024	100	7617	0	5057	450100	8883.50
52	06/05/2024	100	7568	8641	4870	450790	8822.90
53	06/05/2024	100	7617	8784	4962	450050	8854.07
54	06/05/2024	100	7544	0	5064	450590	8806.88
55	06/05/2024	100	7430	0	5084	450240	8807.26
56	06/06/2024	100	7696	8308	5267	450180	8722.48
57	06/06/2024	100	7382	8319	5320	450160	8805.86
58	06/06/2024	100	7337	8484	5158	450173	8811.14
59	06/06/2024	97	7272	0	5234	441720	8907.52
60	06/07/2024	100	7495	8346	4900	450301	8778.38
61	06/07/2024	99	8164	8893	5319	450157	8712.17
62	06/07/2024	97	7854	8563	4673	440074	8902.33
63	06/07/2024	100	7401	0	5144	450140	8793.21
64	06/07/2024	100	7398	0	5102	450180	8782.93
65	06/07/2024	99	7802	8268	5027	450105	8751.05
66	06/08/2024	99	7555	8190	4719	450259	8729.74
67	06/08/2024	99	7564	0	4858	450180	8717.36
68	06/09/2024	96	7691	8131	4570	450530	8736.29
69	06/09/2024	99	7445	0	5168	450740	8705.00
70	06/10/2024	96	7497	8410	4916	450101	8828.50
71	06/10/2024	100	7212	0	4924	450109	8720.62
72	06/10/2024	100	7219	0	4840	450180	8711.43
73	06/11/2024	100	7250	8835	4675	450100	8691.38
74	06/12/2024	99	7618	8524	4947	450171	8650.12
75	06/12/2024	99	7689	8571	4826	450130	8621.62
76	06/12/2024	100	7774	8484	5189	449690	8620.76
77	06/12/2024	100	7025	8485	5042	451100	8668.17
78	06/12/2024	95	7474	8613	4723	436033	8539.45
79	06/13/2024	95	7164	8475	4763	450710	8607.83
80	06/13/2024	100	7321	7957	4676	450977	8590.38
81	06/13/2024	97	7376	8490	5308	344300	8623.31
82	06/14/2024	100	7054	8215	5164	449300	8583.21
83	06/15/2024	100	6798	8652	4962	448376	8671.62
84	06/15/2024	98	7183	8103	5191	450380	8635.57
85	06/16/2024	100	6843	7930	4697	447460	8620.48

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Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	05/05/2024
Job End Date:	06/17/2024
State:	West Virginia
County:	Marshall
API Number:	47-051-02279-00-00
Operator Name:	EQT Production
Well Name and Number:	Knob Creek N-2HM
Latitude:	39.770008
Longitude:	-80.70556
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	6228
Total Base Water Volume (gal)*:	31616104.38
Total Base Non Water Volume:	0



Water Source	Percent
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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	EQT	Carrier/Base Fluid					
			Water	7732-18-5	100.00000	87.40601	None
Sand (Proppant)	EQT	Proppant					
			Silica Substrate	14808-60-7	100.00000	12.42167	None
StimSTREAM FR 9800	ChemStream	Friction Reducer					
			ALKANES, C12-26-BRANCHED AND LINEAR	90622-53-0	40.00000	0.01812	None
StimSTREAM FR 9800	ChemStream	Friction Reducer					
			ACRYLAMIDE-CHLORIDE SALT OF TRIMETHYLAMMONIO-ETHYL ACRYLATE COPOLYMER	69418-26-4	40.00000	0.01812	None
Clearal 268	ChemStream	Biocide					
			Water	7732-18-5	80.00000	0.00883	None

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StimSTREAM FR 9800	ChemStream	Friction Reducer					
			Water	7732-18-5	15.00000	0.00255	None
HCR-7000 WL	Fluid USA, Inc.	Synthetic Acid					
			FLUID-Acid-00001	Proprietary	20.00000	0.00144	None
Clearal 268	ChemStream	Biocide					
			Glutaraldehyde	111-30-8	20.00000	0.00055	None
HCR-7000 WL	Fluid USA, Inc.	Synthetic Acid					
			FLUID-Amine-00001	Proprietary	10.00000	0.00036	None
StimSTREAM FR 9800	ChemStream	Friction Reducer					
			ETHOXYLATED ALCOHOLS (C12-16)	68551-12-2	5.00000	0.00028	None
StimSTREAM SC-398	ChemStream	Scale Inhibitor					
			AA/ATBS Co-polymer	9003-05-8	5.00000	0.00002	None
Clearal 268	ChemStream	Biocide					
			Quaternary Ammonium Compounds	68424-85-1	3.00000	0.00001	None
Clearal 268	ChemStream	Biocide					
			Didecyl dimethyl ammonium chloride	7173-51-5	3.00000	0.00001	None
Clearal 268	ChemStream	Biocide					
			Ethanol	64-17-5	1.50000	0.00000	None
StimSTREAM SC-398	ChemStream	Scale Inhibitor					
			AA/Maleic Anhydride Co- polymer	9003-04-7	1.00000	0.00000	None

Ingredients shown above are subject to 29 CFR 1910.1200(i) and appear on Material Safety Data Sheets (MSDS). Ingredients shown below are Non-MSDS

* 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%

Note: For Field Development Products (products that begin with FDP), MSDS level only information has been provided.

Ingredient information for chemicals subject to 29 CFR 1910.1200(i) and Appendix D are obtained from suppliers Material Safety Data Sheets (MSDS)

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Knob Creek Well N-2HM
EQT PRODUCTION CO.

10,932' T.H.

7,637' B.H.

T.H. LATITUDE 39°47'30"
 B.H. LATITUDE 39°50'00"

TAG	SURFACE OWNER	PARCEL	ACRES
A	DAVID L. & LINDA L. FRANKLIN	9-14-33	65.824
B	MARGARET FOX - LIFE	9-14-39	0.19
C	MARGARET FOX - LIFE	9-14-41	0.21
D	DAVID L. & LINDA L. FRANKLIN	9-14-44	2.913
E	STATE OF WEST VIRGINIA (FISH CREEK)	N/A	N/A
F	JOHN C. LAGOS, ET UX	9-14-42	1.87
G	MARGARET FOX - LIFE	9-14-46	18.88
H	MARGARET FOX - LIFE	9-13-13	15.513
I	ANDREW I. FROHNAPFEL	9-13-12	91.1007
J	DANIEL JAY FITZWATER	9-13-20	105.5
K	ELEANOR M. FOX EST.	9-13-18	30.00
L	XCL MIDSTREAM OPERATING LL C	9-13-22	42.27
M	KENNETH & TERESA A. SMERTNECK	9-13-11	112.67

N	SHUTLER FAMILY TRUST	9-13-8	56.04
O	ARTHUR L. MOORE	9-13-10	3.96
P	MARGARET K. FOX - LIFE	9-11-2	84.378
Q	GERALD F. PADLOW, ET UX	9-11-1	1.033
R	RAY A. WHETZEL, JR., ET AL	9-10-13	71.11
S	WILLIAM MCCONNELL	9-10-14	15.00
T	JOSEPH MICHAEL BONENE	9-10-15	44.00
U	KENNETH W. MASON EST.	9-10-5	51.62
V	J. F. CROW ESTATE, ET AL	9-6-15	55.23
W	TODD L. CARNEY	9-6-16	23.05
X	WILLIAM N. ROUPE	9-6-3	110.09
Y	MICHAEL E. McCARDLE, ET UX	9-4-17	65.791

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

NAD'83 S.P.C.(FT)	N. 464,849.78	E. 1,629,645.60
NAD'83 GEO.	LAT-(N) 39.770008	LONG-(W) 80.705559
NAD'83 UTM (M)	N. 4,402,272.33	E. 525,217.50

LANDING POINT

NAD'83 S.P.C.(FT)	N. 465,427.6	E. 1,628,758.1
NAD'83 GEO.	LAT-(N) 39.771562	LONG-(W) 80.708744
NAD'83 UTM (M)	N. 4,402,443.8	E. 524,944.2

BOTTOM HOLE

NAD'83 S.P.C.(FT)	N. 478,552.8	E. 1,621,412.6
NAD'83 GEO.	LAT-(N) 39.807317	LONG-(W) 80.735517
NAD'83 UTM (M)	N. 4,406,405.2	E. 522,639.5

AS DRILLED COORDINATES FOR WELL NO. N-2HM

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

NAD'83 S.P.C.(FT)	N. 464,849.78	E. 1,629,645.60
NAD'83 GEO.	LAT-(N) 39.770008	LONG-(W) 80.705559
NAD'83 UTM (M)	N. 4,402,272.33	E. 525,217.50

LANDING POINT

NAD'83 S.P.C.(FT)	N. 465,552.2	E. 1,628,689.7
NAD'83 GEO.	LAT-(N) 39.771901	LONG-(W) 80.708993
NAD'83 UTM (M)	N. 4,402,481.4	E. 524,922.7

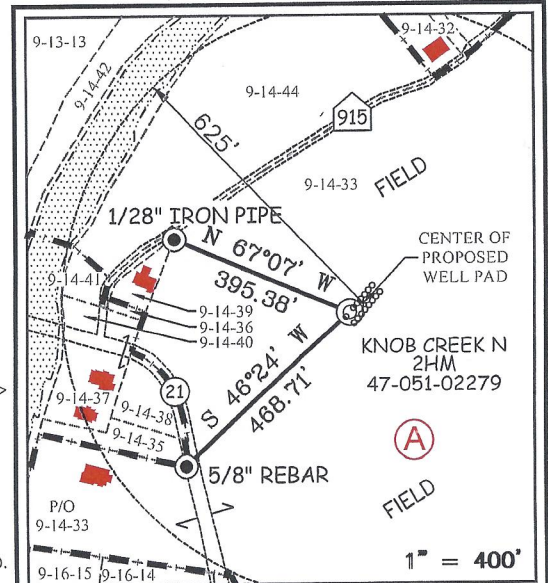
BOTTOM HOLE

NAD'83 S.P.C.(FT)	N. 478,550.1	E. 1,621,408.5
NAD'83 GEO.	LAT-(N) 39.807309	LONG-(W) 80.735532
NAD'83 UTM (M)	N. 4,406,404.3	E. 522,638.3

T.H. A.D.

B.H. A.D.

REFERENCES



NOTES ON SURVEY

- NO WATER WELLS WERE FOUND WITHIN 250' OF PROPOSED GAS WELL. NO AGRICULTURAL BUILDINGS > 2500 SQ. FT. WERE FOUND WITHIN 625' OF THE CENTER OF PROPOSED WELL PAD.
- SEE REFERENCES FOR DWELLINGS LOCATED WITHIN 625' OF THE CENTER OF PROPOSED WELL PAD.
- WELL SPOT CIRCLE & TOPO MARK SCALE IS 1"=2000'.
- BASED ON WV DOT COUNTY ROUTE 74 IS A 40' STRIP OF LAND ACQUIRED IN NUMEROUS DEEDS.
- PLAT UPDATED TO SHOW AS-DRILLED PATH. AS-DRILLED DATA PROVIDED BY EQT PRODUCTION CO.



12 Vanhorn Drive | P.O. Box 150 | Glenville, WV 26351 | 304.462.5634
 1412 Kanawha Boulevard, East | Charleston, WV 25301 | 304.346.3952
 254 East Beckley Bypass | Beckley, WV 25801 | 304.255.5296
 slswv.com

I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DIVISION OF ENVIRONMENTAL PROTECTION.



P.S. 677 Gregory A. Smith

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.
 DATE NOVEMBER 20, 2023
 REVISED DECEMBER 29, 2023
 OPERATORS WELL NO. Knob Creek N-2HM
 API WELL NO. 47-051-02279
 STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 2500 FILE NO. 8789-EQT-KC-2HM-Asdrilled-122923-MJH.dwg
 HORIZONTAL & VERTICAL CONTROL DETERMINED BY DGPS (SURVEY GRADE TIE TO CORS NETWORK) SCALE 1" = 2000'

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

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

LOCATION :
 ELEVATION 737.50' WATERSHED FISH CREEK (HUC 10)
 DISTRICT MEADE COUNTY MARSHALL QUADRANGLE GLEN EASTON 7.5'
 SURFACE OWNER DAVID L. & LINDA L. FRANKLIN ACREAGE 65.824±
 ROYALTY OWNER DAVID LEE FRANKLIN, ET AL - SEE WW-6A1 ACREAGE 02107#2025
 PROPOSED WORK :
 LEASE NO. SEE WW-6A1

DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION PLUG AND ABANDON CLEAN OUT AND REPLUG OTHER
 PHYSICAL CHANGE IN WELL (SPECIFY) _____ TARGET FORMATION MARCELLUS
 ESTIMATED DEPTH TVD: 6,198' / TMD: 21,636'

WELL OPERATOR EQT PRODUCTION COMPANY DESIGNATED AGENT JOSEPH C. MALLOW
 ADDRESS 400 WOODCLIFF DRIVE ADDRESS 427 MIDSTATE DRIVE
CANONSBURG, PA 15317 CLARKSBURG, WV 26301

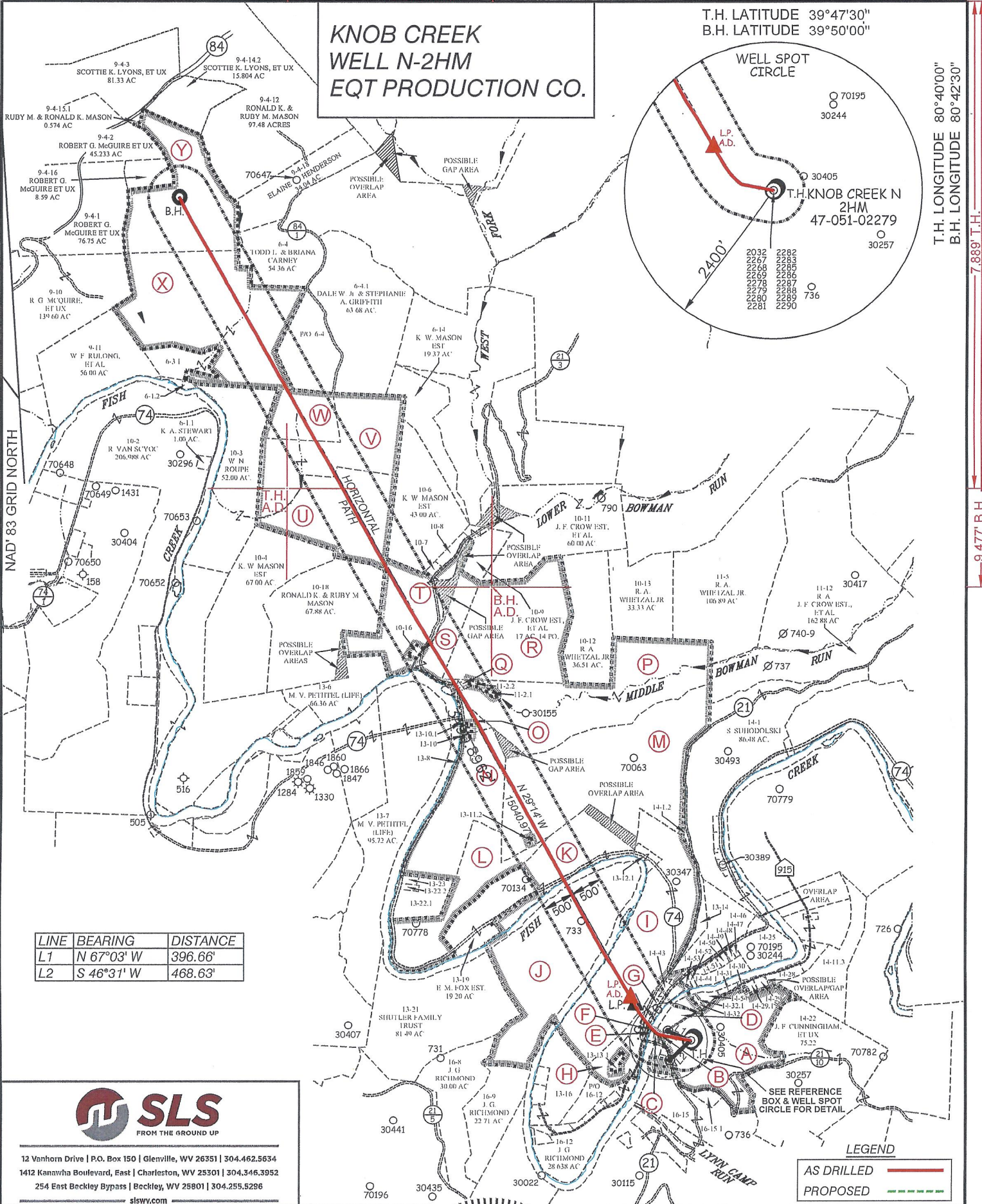
T.H. LONGITUDE 80°40'00"
 B.H. LONGITUDE 80°42'30"
 7,889' T.H.
 9,477' B.H.

**KNOB CREEK
WELL N-2HM
EQT PRODUCTION CO.**

T.H. LATITUDE 39°47'30"
B.H. LATITUDE 39°50'00"

WELL SPOT
CIRCLE

T.H. LONGITUDE 80°40'00"
B.H. LONGITUDE 80°42'30"



LINE	BEARING	DISTANCE
L1	N 67°03' W	396.66'
L2	S 46°31' W	468.63'

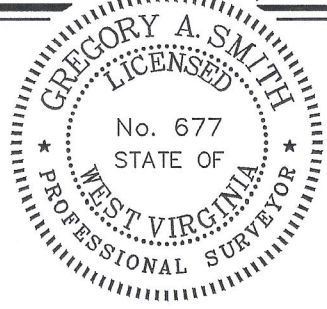
SLS
FROM THE GROUND UP

12 Vanhorn Drive | P.O. Box 150 | Glenville, WV 26351 | 304.462.5634
1412 Kanawha Boulevard, East | Charleston, WV 25301 | 304.346.3952
254 East Beckley Bypass | Beckley, WV 25801 | 304.255.5286

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

NAD'83 S.P.C.(FT)	N. 464,849.78	E. 1,629,645.60
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NAD'83 GEO.	LAT-(N) 39.807317	LONG-(W) 80.735517
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(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.

P.S. 677 *Gregory A. Smith*

LEGEND

LEASE LINE	
SURFACE LINE	
WELL LATERAL	
OFFSET LINE	
TIE LINE	
CREEK	
ROAD	
COUNTY ROUTE	
PROPOSED WELL	
EXISTING WELL	
PERMITTED WELL	
TAX MAP-PARCEL	
SURFACE OWNER (SEE TABLE)	
LEASE # (SEE WW-6A1)	

SCALE 1" = 2000' FILE NO. 8789-EQT-KC-2HM-Asdrilled-122923-M.H.hwg

DATE NOVEMBER 20, 2023
REVISED DECEMBER 29, 2023

OPERATORS WELL NO. KNOB CREEK N 2HM
API WELL NO. 47-051-02279
NO. STATE COUNTY PERMIT

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

02/07/2025

WELL OPERATOR EQT PRODUCTION COMPANY ADDRESS 400 WOODCLIFF DRIVE CANONSBURG, PA 15317
DESIGNATED AGENT JOSEPH C. MALLOW ADDRESS 427 MIDSTATE DRIVE CLARKSBURG, WV 26301

COUNTY NAME PERMIT