



Groundwater and Environmental Professionals Since 1891

August 22, 2025

Mr. Justin Najewicz
Pennsylvania Department of Environmental Protection
New Stanton District Office
131 Broadview Road
New Stanton, PA 15672

**RE: LPR Energy, LLC
PMG Baird Unit 1H Gas Well (API #37-111-20297)
Lower Turkeyfoot Township, Somerset County, Pennsylvania
Notice of Intention By Well Operator To Plug A Well**

Dear Justin:

As a follow up to our recent conversations, Moody and Associates, Inc. (Moody) continues to assist LPR Energy (LPR) to provide well plugging consulting services to work toward addressing the various concerns that the Pennsylvania Department of Environmental Protection (PA DEP) has regarding the plugging of the PMG Baird #1H gas well located in Lower Turkeyfoot Township, Somerset County, Pennsylvania. Please find enclosed, new versions of the following items (several as appendices) that are part of the Notice of Intention By Well Operator To Plug A Well (NOI) submittal for the above referenced well:

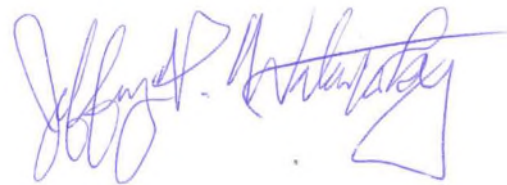
- NOI Form
- Well Location Plat
- Current Well Record and Post-Drilling Well Details
- Application for Approval of Alternate Method of Plugging and Correspondence Letter to PA DEP
- Plugging Procedure Letter from Moody

- Well Plugging Schematic

If deemed necessary, Moody and LPR would be pleased to meet with you to further discuss our approach and address your concerns regarding this well plugging project. If you have any questions or require additional information, please contact our office at 724-746-5200 or via email me at jwalentosky@moody-s.com.

Sincerely,

Moody and Associates, Inc.

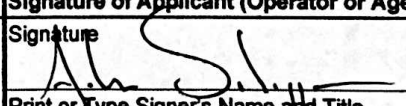


Jeffrey P. Walentosky, P.G.
President

Cc: April Weiland – PA DEP
Adam Schoppe – LPR Energy
Bob Liddle – LPR Energy
Austin Hill – LPR Energy
File



NOTICE OF INTENTION BY WELL OPERATOR TO PLUG A WELL

☒ Well Operator ☐ Coal Operator		OGO No. 68579	U.S. Well No. (Permit / Reg) 37-111-20297	Date Drilled (if known) 4/13/2011
Name LPR Energy, LLC		304679	Well Farm Name PMG Baird Unit 733907	
Address P.O. Box 192009		Telephone No. 814 765-6300	Well No. 1H	Well Serial No.
City Dallas	State TX	Zip Code 75219	County Somerset	
☒ Agent (contractor) acting on behalf of the operator named above. Plants and Goodwin, Inc.		Municipality Lower Turkeyfoot		
Address 369 High Street		Telephone No. 814 904-6035	Latitude (DD) 39.854806	Longitude (DD) - 79.334722
City Bradford	State PA	Zip Code 16701	<i>Attach well record if not previously submitted.</i>	
Complete this section if applicable. Prior to abandoning any well in an area underlain by a workable coal seam, the well operator or owner shall notify the coal operator, lessee, or owner of the intention to plug and abandon the well, and shall submit a plat showing the location and affix the date and time at which the work of plugging will commence.				
Coal: ☐ Operator ☒ Owner ☐ Lessee		Coal: ☐ Operator ☐ Owner ☐ Lessee		Coal: ☐ Operator ☐ Owner ☐ Lessee
Name The Luther B. Nace, Jr. Family Trust		Name		Name
Address 224 Covered Bridge Road		Address		Address
City, State, Zip Code Confluence, PA 15424		City, State, Zip Code		City, State, Zip Code
Telephone No.	Notified? ☒ Yes ☐ No	Telephone No.	Notified? ☐ Yes ☐ No	Telephone No. Notified? ☐ Yes ☐ No
This Party hereby waives the rights to be notified of the date and time before plugging work will begin and to be present at the plugging of this well. Signature:		This Party hereby waives the rights to be notified of the date and time before plugging work will begin and to be present at the plugging of this well. Signature:		This Party hereby waives the rights to be notified of the date and time before plugging work will begin and to be present at the plugging of this well. Signature:
Scheduled Date and Time of Plugging Plugging is scheduled to begin on (date) 8/29/2025 at (time) 8 AM		☐ CHECK BLOCK IF THIS WELL IS BEING PLUGGED PERSUANT TO MINE THROUGH STANDARDS OF ACT 214 of 1984 (REVISED 2011) AND the 2012 Oil & Gas Act.		
Checklist and Additional Attached Information ☒ Location Plat ☒ Current Well Record ☐ Available Well Record ☒ Application for Approval of Alternate Method of Plugging ☐ Mine - Through ☒ Other, describe: Appendix D- Plugging Procedure Letter, Appendix E - Well Plugging Schematic, Appendix F - Coal Owner Notification Letter		Signature of Applicant (Operator or Agent) Signature:  Date: 8/22/2025 Print or Type Signer's Name and Title Adam Schoppe, COO, LPR Energy, LLC		

APPENDIX A

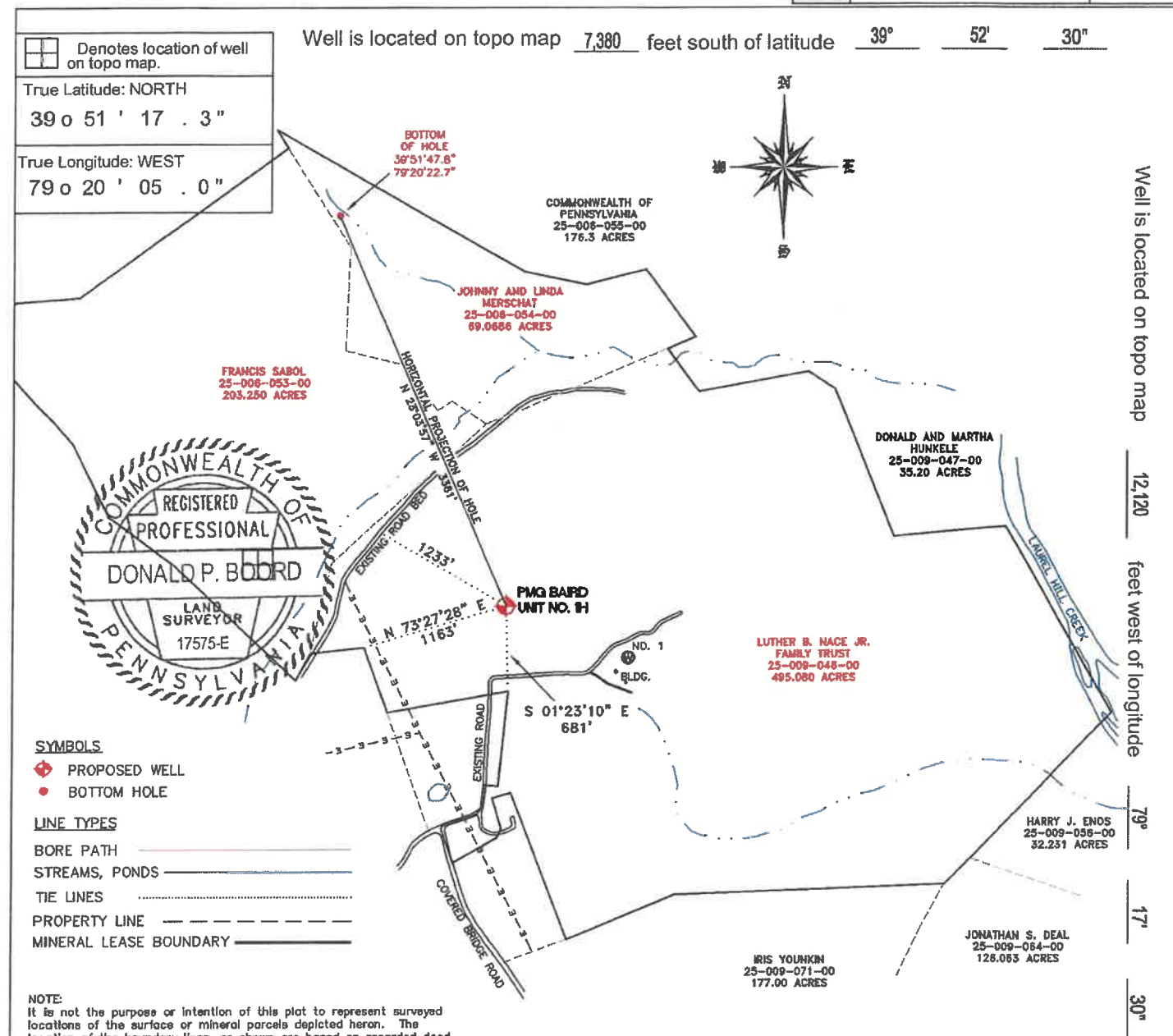
WELL LOCATION PLAT



pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Oil and Gas Management Program
WELL LOCATION PLAT

DEP USE ONLY	DEP Application Tracking #	G:
	Permit #	C:
	Project #	



Surveyor or Engineer **BOORD, BENCHEK and ASSOC.**
DONALD P. BOORD P.L.S.

Phone # **724-746-1105**

Dwg. # **1342**

REVISED DATE: **JUNE 08, 2010**

DATE: **NOV 27, 2009**

Scale **1" = 1200'**

ZONING = NONE
Tract ACREAGE **767.3986 +/-**

Lat. & Long Metadata			Elevation Metadata			Survey Date	
Method	GPSKN	Accuracy 4'	Datum	NAD83	Method	GPSKN	Accuracy 6'
Applicant / Well Operator Name			Well(Farm) Name			Well #	Serial #
CHIEF OIL & GAS LLC			PMG BAIRD UNIT			1H	
Address			County - Code		Municipality		WELL TYPE
5956 SHERRY ROAD, DALLAS, TX 75225			SOMERSET-56		LOWER TURKEYFOOT TWP.		GAS
Surface Landowner/Lessor			USGS 71/2 Quadrangle Map Name			Map Section	Surface Elevation
LUTHER B. NACE JR., FAMILY TRUST			CONFLUENCE			2	1,830 ft.
Target Formation(s)			Angle & Course of Deviation (Drilling)			Anticipated Total Depth	
MARCELLUS			HORIZONTAL-90 N 23 W @ 3381'			TVD: 9,500'	TMD: 12,526'
Surface Owner or Water Purveyor with a Water Supply within 1,000 ft.		Approximate Course and Distance to Water Supply		Owner, Lessee, or Operator of Workable Coal Seam		Name of Coal Seam Owned, Leased, or Operated	
				M F LAND CO., INC.		UPPER FREEPORT & UPPER KITTANNING SEAMS	
				LUTHER B. NACE, JR. FAMILY TRUST		UPPER FREEPORT & UPPER KITTANNING SEAMS	

APPENDIX B

CURRENT WELL RECORD & POST-DRILLING WELL DETAILS



pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OIL AND GAS MANAGEMENT PROGRAM

Well Record

DEP USE ONLY	
Site ID	Primary Fac ID
Client Id	Subfacility Id

WELL INFORMATION													
Well Operator CHIEF OIL & GAS LLC			DEP ID# OGO-66495		Well API # (Permit / Reg) 37-111-20297-00-			Project Number		Acres			
Address 5956 SHERRY LN STE 1500					Well Farm Name PMG Baird Unit			Well # 1H		Serial #			
City DALLAS			State TX		Zip Code 75225-8026		County Somerset		Municipality Lower Turkeyfoot				
Phone (214)265-9590			Fax		Email			USGS 7.5 min. quadrangle map					
Check the appropriate Submission: ☒ Original Well Record ☐ Amended Well Record													
Well Type		☒ Gas		☐ Oil		☐ Combination Oil & Gas		☐ Injection		☐ Storage		☐ Disposal	
Well Orientation		☐ Vertical		☒ Deviated from Vertical (Side view and Deviated Survey must be attached)									
Drilling Method		☐ Rotary - Air		☒ Rotary - Mud		☐ Cable Tool							
Date Drilling Started 4/13/2011		Date Drilling Completed 5/26/2011		Surface Elevation 1830 ft.		Total Depth - Driller 12505 ft.		Total Depth - Logger 12505 ft.		Depth of Deepest Fresh Groundwater 600 ft.			

CEMENT					
Cement returned on surface casing?		☒ Yes ☐ No		If No, provide top of cement and method used to determine:	
Cement returned on coal protective casing?		☒ Yes ☐ No		If No, provide top of cement and method used to determine: ☐ N/A	
Cement returned on intermediate casing?		☒ Yes ☐ No		If No, provide top of cement and method used to determine: ☐ N/A	
Casing String	Type of Cement	Amount of Cement	Gas Block (or equivalent) Used		
Conductor	Driven In	N/A			
Surface	Gas Block	260sx	☒ Yes	☐ No	☐ N/A
Coal Protective	Gas Block	480sx	☒ Yes	☐ No	☐ N/A
Intermediate	Gas Block	615sx	☒ Yes	☐ No	☐ N/A
Production	50/50 poz / Class H	1087sx	☐ Yes	☒ No	☐ N/A
		DEP CAMBRIA OFFICE	☐ Yes	☐ No	☐ N/A
		JAN 30 2012	☐ Yes	☐ No	☐ N/A
			☐ Yes	☐ No	☐ N/A

CASING AND TUBING									
Hole Size	Pipe Size	Wt.	Thread / Weld	Casing / Tubing Type	Amount in Well (ft.)	Packer / Hardware / Centralizers			Date Run
						Type	Size	Depth	
24"	24"	96 lb	Weld		60		24"	60'	4/14/11
23.75"	20"	94 lb	Buttress	J-55	223.55	FS	20"	223.55'	4/24/11
17.5"	13-3/8"	54.5 lb	8RD	J-55	593.05	FS	13-3/8"	593.05'	4/26/11
12.25"	9-5/8"	36 lb	8RD	K-55	1831	FS	9-5/8"	1831'	4/29/11
8.5"	5-1/2"	20 lb	CDC	P-110	12493	FS	5-1/2"	12493'	5/24/11

If any casing is welded, provide the name of the welder: Ziegenfuss Drilling, INC., SOUTHWEST REGION
All casing strings Centralized
Also complete the Log of Formations on back (page 2)

[illegible]

WELLBORE DATA AND SKETCH

ID: 12505'

APPENDIX C

APPLICATION FOR APPROVAL OF ALTERNATE METHOD OF PLUGGING & CORRESPONDENCE LETTER

August 20, 2025

8000-PM-OOGM0024 4/2012



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS MANAGEMENT

DEP USE ONLY
Application Tracking #

Proposed Alternate Method or Material for Casing, Plugging, Venting or Equipping a Well

Well Operator LPR Energy, LLC		DEP ID# 68579		Well Permit or Registration Number 37-111-20297	
Address P.O Box 192009				Well Farm Name PMG Baird Unit	
City Dallas	State TX	Zip Code 75219	Well # 1H	Serial #	
Phone 814 765-6300	Fax	County Somerset	Municipality Lower Turkeyfoot		

A proposed alternate method is subject to provisions in §3221 of the 2012 Oil and Gas Act, 58 Pa. C.S. §3221 Section 13 of the Coal and Gas Resource Coordination Act, 58 P.S. §513 and 25 PA Code §§78.75-78.75a (relating to Alternate Methods.) **Attach proof of notification of coal operator(s).**

Describe in reasonable detail using a written description and / or diagram:

1. the proposed alternate method or materials, and
2. the manner in which the alternative will satisfy the goals of the laws and regulations.

A proposed alternate method of plugging is being requested in accordance with 78a.75(a). A detailed well plugging schematic for the proposed alternate method is attached in accordance with 78a.75(b)(3). The reasoning for this alternate method request regarding 78a.92(b)(2) is for the placement of two previously installed cast iron bridge plugs (CIBPs) at 6,909 and 7,000 feet and the proposed placement of a third, 10,000 psi CIBP at 6,850 feet. Overall concerns regarding the conditions below the two existing bridge plugs and risking a potential well control incident creating potential impacts to the surface and shallow subsurface are the reasoning for this request.

LPR proposes to forego the venting requirements of 78a.92(a)(3). In lieu of venting the well, LPR proposes to cement the well from 6,850 feet to surface utilizing Class L cement or other Department approved cement types in order to comply with 78a.91(h) and §3220 (a) to stop the vertical flow of fluids or gas within the well bore.

Optional: Approval by Coal Owner or Operator		Signature of Applicant / Well Operator	
Signature 	Date 8/20/2025	Signature 	Date 8/20/2025
Print or Type Signer's Name and Title The Luther B. Nace Jr. Family Trust, Nellie Jacob Trustee		Print or Type Signer's Name and Title Adam Schoppe, COO, LPR Energy, LLC	

If optional approval is signed by coal owner or operator, the 15-day objection period may be waived.

DEP USE ONLY		
Approved by (DEP Manager)	Conditions ☐ YES, See Attached ☐ NO	Date

LPR ENERGY, LLC
P.O. Box 403 DuBois, PA 15801
Tel (814) 765-6300 X 205
regulatory@lprenergy.com
www.lprenergy.com



August 19, 2025

The Luther B. Nace, Jr. Family Trust, dated 12/14/2023

Attn: Nellie Jacob

224 Covered Bridge Road

Confluence, PA 15424

DELIVERED ELECTRONICALLY VIA DOCUSIGN

RE: NOTICE OF INTENT TO PLUG – PMG BAIRD UNIT 1H - API 37-111-20297

Dear Luther B. Nace, Jr. Family Trust,

The records of Somerset County indicate that you are the owner of the coal seams underlying the PMG Baird Unit 1H, API #37-111-20297. LPR Energy LLC (“LPR”) intends to plug and abandon the PMG Baird Well and is required by law to advise you of its intent to do so.

Included within are the following documents for your review:

1. Proposed alternate method for plugging form that will be submitted to the DEP
2. Well Plugging Schematic
3. Location Plat

LPR plans to submit a notice of intention by well operator to plug a well (“NOI”) with an alternate method to the Department of Environmental Protection (“DEP”), and if approved by DEP, plans to commence plugging operations, as soon as allowed by law thereafter.

Should you have any questions please feel free to contact the undersigned at 814-765-6300 x 205 or by email at bob@lprenergy.com.

Robert J. Liddle

A handwritten signature in blue ink, appearing to read 'Robert J. Liddle'.

Enclosures

Alternate Method Form

Well Plugging Schematic

Location Plat



5500-PM-OG0002-DWG Rev. 09/2008

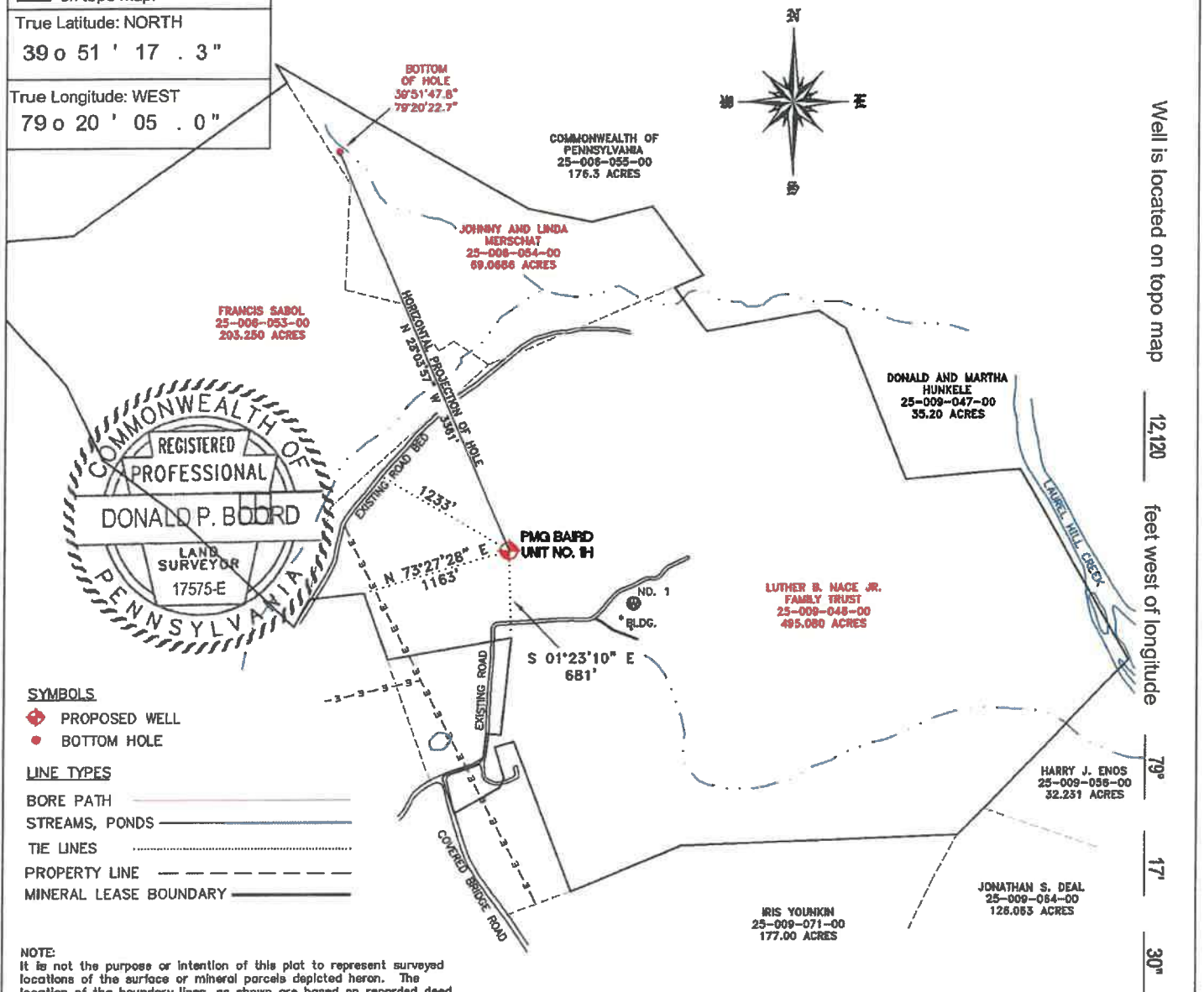


pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Oil and Gas Management Program
WELL LOCATION PLAT

DEP USE ONLY	DEP Application Tracking #	G:
	Permit #	C:
	Project #	

Denotes location of well on topo map.
True Latitude: NORTH 39° 51' 17.3"
True Longitude: WEST 79° 20' 05.0"

Well is located on topo map 7,380 feet south of latitude 39° 52' 30"**SYMBOLS**

- ◆ PROPOSED WELL
- BOTTOM HOLE

LINE TYPES

- BORE PATH
- STREAMS, PONDS
- TIE LINES
- PROPERTY LINE
- MINERAL LEASE BOUNDARY

NOTE:

It is not the purpose or intention of this plat to represent surveyed locations of the surface or mineral parcels depicted herein. The location of the boundary lines, as shown are based on recorded deed descriptions, field evidence found, aerial mapping and/or tax map position, unless otherwise noted.

Surveyor or Engineer **BOORD, BENCHEK and ASSOC.**
DONALD P. BOORD P.L.S.

Phone # 724-746-1105

Dwg. # 1342

REVISED DATE: JUNE 08, 2010

DATE: NOV 27, 2009

Scale 1" = 1200'

ZONING = NONE
Tract ACREAGE 767.3986 +/-

Lat. & Long Metadata				Elevation Metadata				Survey Date				
Method	GPSKN	Accuracy	4'	Datum	NAD83	Method	GPSKN	Accuracy	6'	Datum	NAVD88	NOV 24, 2009
Applicant / Well Operator Name				DEP. ID		Well (Farm) Name		Well #		Serial #		
CHIEF OIL & GAS LLC				#258445		PMQ BAIRD UNIT		1H				
Address				County - Code		Municipality		WELL TYPE				
5956 SHERRY ROAD, DALLAS, TX 75225				SOMERSET-56		LOWER TURKEYFOOT TWP.		GAS				
Surface Landowner/Lessor				USGS 71/2 Quadrangle Map Name				Map Section		Surface Elevation		
LUTHER B. NACE JR., FAMILY TRUST				CONFLUENCE				2		1,830 ft.		
Target Formation(s)				Angle & Course of Deviation (Drilling)				Anticipated Total Depth				
MARCELLUS				HORIZONTAL-90 N 23 W @ 3381'				TVD: 9,500' TMD: 12,526'				
Surface Owner or Water Purveyor with a Water Supply within 1,000 ft.				Approximate Course and Distance to Water Supply				Name of Coal Seam Owned, Leased, or Operated				
								UPPER FREEPORT & UPPER KITTANNING SEAMS				
				M F LAND CO., INC.								
				LUTHER B. NACE, JR. FAMILY TRUST				UPPER FREEPORT & UPPER KITTANNING SEAMS				

APPENDIX D

PLUGGING PROCEDURE LETTER

MOODY AND ASSOCIATES, INC.

JUNE 30, 2025



June 30, 2025

Mr. Adam Schoppe
LPR Energy
8333 Douglas Avenue, Suite 1010
Dallas, TX 75225

RE: *Proposed Plugging Procedure*
PMG Baird Unit 1H Gas Well
Lower Turkeyfoot Township, Somerset County, Pennsylvania

Dear Adam:

As a follow up to our recent conversations with the Pennsylvania Department of Environmental Protection (PA DEP) on the proposed well plugging procedures for the PMG Baird Unit 1H gas well, Moody and Associates, Inc. (Moody) has reviewed the well completion report and your initial plans for the plugging of the subject well. Moody appreciates the opportunity to work with LPR Energy (Client) to provide consulting services to work toward addressing the various concerns that the PA DEP has regarding the plugging of the subject well located in Lower Turkeyfoot Township, Somerset County, Pennsylvania. While we have prepared our recommended approach, Moody does not offer any guarantees that these proposed procedures will be accepted by the Department.

Here is Moody's understanding that the following conditions exist in the PMG Baird Unit #1:

Casing Schedule:

- 20" Casing at 233 Feet (Conductor)
- 13.375" Casing at 593 Feet (Surface)
- 9.625" Casing at 1,831 Feet (Intermediate)

- 5.5" Casing at 12,496 Feet (Production)

Total Depth of Borehole at 12,505 Feet

Hole deviated 3,397.57 Feet from SE to NW.

Drilling Date: April 26, 2011 to May 26, 2011

Completion Treated Interval:

- Marcellus Shale: 8,682' - Top of Marcellus

Additional Well Information:

- A Cast Iron Bridge Plug (CIBP) was previously set at 7,000 Feet.
- A Cast Iron Bridge Plug (CIBP) was previously set at 6,909 Feet.

Anticipated Plugging Procedure:

Even though no coal was present in the Driller's Log, we recommend that the procedures in §78a.92 will be followed, as the well is located in a known coal area, which is noted on the original well plat.

With the presence of the two CIBPs at 6,909 and 7,000 feet, it is suggested that the Alternate Method and Attainable Bottom is requested, where Section 3221 of the Oil and Gas Act is followed to stop the vertical flow of fluids or gas within the well bore. This alternative method is being proposed due to the potential environmental, health and safety impacts for drilling out the two CIBPs and the unknown conditions that exist below the two CIBPs. It is anticipated that between the two existing CIBPs, a newly installed CIBP at 6,850 feet, along with emplacement of in excess of 1250 sacks of Class L or other PA DEP approved cement types, should meet or exceed the regulatory obligations and the overall objectives of this well plugging process. The following outlines our recommended procedures to be followed, which is built upon LPR and Moody's recent discussions with the PA DEP:

1. Meet onsite to conduct site inspection, install well site containment controls, review and implement E&S plans and controls (§78a.53), pressure barrier policy (§78a.72 and §78a.87), review and implement control and disposal (C & D) plan (§78a.55).
2. Mobilize all necessary equipment on site.
3. Nipple up to the Blowout Preventer (BOP) & test.
4. Blow well down and verify well is dead. If necessary, kill the well and follow H2S protocol if needed.
5. Rig up wire line and Run in Hole (RIH) with gauge ring and junk basket to 6,900' to confirm presence of existing CIBP, then pull out of hole (POOH).
6. RIH with Radial Cement Bond Log (RCBL) to confirm cement tops under zero pressure.
7. RIH to set an additional 10,000 PSI CIBP. Set at 6850 Feet. POOH.
8. RIH with work string tag 10,000 CIBP at 6,850 Feet.
9. Pump 106 sacks of Class L cement in a 21.93 bbl slurry from 6,850 to 5,850 Feet.
10. Pull up 1,000 Feet and sweep work string.
11. Let cement set a minimum of 8 hours or overnight.
12. RIH, tag cement at approximately 5,850 Feet. POOH.
13. RIH with wireline. Based on the geologic review and review of the radial cement bond log (RCBL), LPR will proceed to perforate casing on approximately 20-foot intervals at the following vertical locations:
 - a. 5,300 to 5,850 feet
 - b. 4,490 to 4,820 feet
 - c. 3,100 to 3,900 feet
14. After pulling wireline out of hole, run in hole to pump Type L cement plugs in 500-foot intervals between 2,980 and 5,850 feet with approximately 53 sacks in a 10.96-barrel slurry. There will be a minimum of 4 hour wait time between plugs. POOH.
15. RIH with wireline to cut 5 ½" casing at 2,980 feet.
16. Verify casing is free before releasing wireline (Circulate hole or re-cut if necessary).
17. Pull 5 1/2" casing out of hole and lay down.

18. RIH with tubing to pump two cement plugs between 1,831 and 2,980 feet totaling 407 sacks of Class L cement in an 82.20-barrel slurry. This cement plug covers the borehole to the intermediate shoe.
19. Once inside the intermediate casing, a total of 674 sacks of Type L cement in a 139.45-barrel slurry will be pumped in two separate plugs from 1,831 feet to the surface.
20. In lieu of venting requirements and with the well being cemented to surface (§78a.92 (3)), the well casing would be cut near the ground surface, capped and the API identification tag will be welded on and buried below depth. This is being completed due to ensure compliance with §78a.91(h).
21. Once plugging procedures are completed, cleanup site, demobilize rig and all equipment off site. Complete all required well site restoration activities. Plugging operations have been completed.

While it is expected that these prescribed well plugging procedures are intended to be followed, these procedures are subject to change due to unknown subsurface conditions in the PMG Baird #1H Well or as part of any well plugging process.

As previously stated, it is Moody's professional opinion that this plugging procedure meets or exceeds the following regulations in the Oil and Gas Act:

- § 3220. Plugging requirements. (a) General rule.
- § 3221. Alternative methods.

In addition to the above procedures being added as a narrative to the *Notice of Intention By Well Operator To Plug A Well* form (8000-FM-OOGM0005) and the *Proposed Alternate Method of Material for Casing, Plugging, Venting or Equipping a Well* form (8000-PM-OOGM0024), Moody suggests adding the following to ensure all pertinent information regarding the PMG Baird #1H Well is provided to the Department:

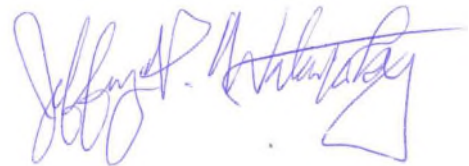
- Original Well Location Plat (5500-PM-OG0002-DWG)
- Original Well Record (5500-FM-OG0004a) with Driller's Log

- Well Bore Diagram illustrating the details of the well, including the existence of the two existing CIBPs.
- The listing of Coal Owners, Lessees, or Operators of Workable Coal Seams and which coals that are owned, leased or operator in the area of the PMG Baird #1H. A Notice of Filing of the application shall be given by the well operator by certified mail to any affected Coal Owners, Lessees or Operators, who may, within 15 days after the notice, file objections to the proposed alternative method or material. If no timely objections are filed or raised by the Department, the Department shall determine whether to allow use of the proposed alternative method or material.

This concludes our review of the work completed to date and potential well plugging scenarios of the PMG Baird #1H gas well. Moody would be pleased to meet with you to further discuss our approach and recommended procedures to this project. If you have any questions or require additional information, please contact our office at 724-746-5200 or via email me at jwalentosky@moody-s.com.

Sincerely,

MOODY AND ASSOCIATES, INC.



Jeffrey P. Walentosky, P.G.

President

Cc: Joseph Scipione – LPR Energy
Bob Liddle – LPR Energy
Sean McGovern – Babst Calland
Moody File



Mr. Josh Hickman, PG
518 Blossom Drive
Canonsburg, PA 15317
(304) 952-9397
June 23, 2025

Mr. Adam Schoppe
LPR Energy
90 Beaver Dr., Suite 104A
DuBois, PA 15801

RE: Baird Well (37-111-20297) Productive Zones Between 2,980 and 5,545 Feet

Mr. Schoppe,

This letter has been written within the Scope of Work agreed to in our mutually executed engagement on February 17, 2025. The objective of this work was for Hickman Consulting Services, LLC (HCS) to recommend a cut point for the pipe and to determine whether or not the Baird Unit 1H well (API 37-111-20297) contained producing or producible formations that were going to be left behind point between the current top of cement at 5,545 feet and the recommended cut point (2,980 feet). After reviewing the available data, HCS has determined that no historically or commercially producing or producible reservoirs exist in the available data. However, three porous zones are recorded on the available logs that have incomplete cement bonding across them and are recommended for cement squeeze jobs during plugging.

Professional Statement

My name is Josh Hickman, P.G., and I have been retained by LPR Energy, on their behalf to recommend a cut point for the pipe and to determine whether or not the Baird Unit 1H well (API 37-111-20297) contained producing or producible formations that were going to be left behind point between the current top of cement at 5,545 feet and the recommended cut point (2,980 feet).

I, Josh Hickman, P.G., present the professional opinions contained in this report and attest that reasonable professional care and skill were taken in their preparation. Should additional information be available or come available outside of what was reviewed to form this professional opinion, I reserve the right to expand upon or update the opinion presented in this report.

Information Reviewed

The following Client-provided data was available for review in this matter:

PMG Baird Unit 1H – API 37-111-20297

- Well Logs
 - Cement Bond Log 4,680’-9,000’
 - FraCADE Advisor 8,000’-8,920’
 - Gamma 0’-8,950’
 - Geoframe OMBI 7,980’-8,970’
 - Mudlog 4,340’-9,000’
 - Nuclear combined 0’-8,980’
 - Rate of Penetration 7,680’-12,500’
 - ShaleGas Log 8,000’-8,940’
 - Sonic Scanner 7,640’-8,920’

Humberston Unit 1H well

- Well File
 - Completion and workover report
 - Daily drilling reports
 - Directional Survey
 - Flowback report
 - Pressure and annular pressure
 - Well plat
 - Well site pictures
 - Well schematics
- Well Logs
 - Boresight interpretation
 - Radial cement bondlog with gamma
 - True Stratigraphic Position (TSP) Log

Fike Unit 1H - API 37-051-24164

- Well Logs
 - Directional Log
 - Laterlog 8,480’-8,660’
 - Mudlog 100’ – 8,700’
 - Nuclear Combined
 - ShaleGas Log 8,480’-8,660’
 - Sonic 8,480’-8,660’

Hall Unit 1H – API 37-051-24403

- Well Logs
 - Pilotheole Mudlog 3,050’ -8,750’

- MWD Log 7,800'-8,600'
- Nuclear Combined 100'-8,750'
- Resistivity 1,650'-8,740'

John Holt Unit 1H – API 37-051-24140

- Well Logs
 - Mudlog 0'-8,400'
 - Nuclear combined 0'-8,410'
 - ShaleGas 6,600'-8,350'

PMG Allen Unit 1H – API 37-111-20296

- Well Logs
 - Laterlog 2,000'-9,000'
 - Mudlog 2,000'-9,000'
 - Nuclear combined 100'-9,000'
 - Rate of Penetration 2,000'-9,000'
 - ShaleGas Log 7,880'-8,040'
 - Sonic 2,000'-9,000'

PMG Grace Unit 1H – API 37-111-20304

- Well Logs
 - Cement Bond Log 0'-2,200'
 - Directional Survey
 - FraCADE Advisor 7,830'-9,110'
 - Mechanical Properties Log 7,830'-9,120'
 - Nuclear combined 100'-9,170'
 - Pulsed Neutron Log 300'-1,740'
 - Rate of Penetration 8,100'-13,300'
 - Resistivity 100'-9,170'
 - Sonic Platform Express 2060'-9,110'
 - True Stratigraphic Position (TSP) Log

The following public files were reviewed for this work:

Ashley, George H and Robinson J French, Oil and Gas Fields of Pennsylvania, Pennsylvania Geological Survey, 1922

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Carter, Kristin et al, Oil and Gas Fields and Pools of Pennsylvania – 1859-2011, Open-File Oil and Gas Report 15-01.2, Pennsylvania Geological Survey, 2015

Flint, Norman K, Geology and Mineral Resources of Southern Somerset County, Pennsylvania, County Report C56A, Pennsylvania Geological Survey, 1965

Harper, J.A., 1999, Devonian, chap. 7 of Shultz, C.H., ed., The geology of Pennsylvania: Pennsylvania Geological Survey and Pittsburgh Geological Society Special Publication 1, p. 108–127

Heyman, Louis, Tully (Middle Devonian) to Queenston (Upper Ordovician) Correlations in the Subsurface of Western Pennsylvania, Mineral Resource Report 73, Pennsylvania Geological Survey, 1977

Hickok IV, WO and Moyer FT, Geology and Mineral Resources of Fayette County, Pennsylvania, Bulletin C26, Pennsylvania Geological Survey, 1940

Kelley, Dana et al, The Petroleum Industry and the Future Petroleum Province in Pennsylvania, Mineral Resource Report 65, Pennsylvania Geological Survey, 1983

Moyer, Forrest T, Structure and Stratigraphy of Fayette County (Preliminary Report), Bulletin No. 115, Topographic and Geologic Survey of Pennsylvania, 1937

Geological Setting

The Baird Unit 1H (Figure 1) well is structurally located in the approximate center of the Lower Youghiogheny Syncline, as it is called in more recent publications, or the Johnstown Syncline, in older publications. The syncline sets up a broad valley that is walled by Laurel Hill in the west and Packhorse Mountain in the East. In the valley some of the youngest rocks in the area are present at the wellhead with the Pennsylvanian Aged, Glenshaw and Casselman Formations of the Conemaugh Group exposed at the surface. With depth, the Pottsville Group is present. These rocks are part of a Pennsylvanian-aged sequence of shale, sandstone, minor coals, clay, and limestones that represents a nearshore depositional environment.

A disconformity separates the Pennsylvanian-aged rocks from the Mississippian-aged marine limestone, shale, and occasional sandstone. These rocks are made up of the Mauch Chunk Formation, Loyahanna Formation, and the Pocono Formation. The shallower (more recent) rocks are primarily made up of red and green shales and thin-bedded limestones and then change to sandstones in the Pocono formation.

The Devonian age rocks lie comfortably below the Pocono Formation sandstones and shales and are represented by thousands of feet of red and grey shales. In the upper part of these rocks, occasional low porosity lensatic sandstones exist. Where it is exposed on the surface in the area, the upper Devonian aged rocks are known as the Catskill Formation (which has red and some green shales with grey lensatic sandstones) and the Jennings Formation (which are grey and black shales with platy sandstone). The transition between the formations is uncertain as the formations inter-tongue. No consistent stratigraphic markers are seen in the shale at depth until the slightly organic Burkett Shale is reached. This thin shale sits upon an equally thin (or absent) limestone known as the Tully limestone, which is generally not well-developed in the area. Below the Tully limestone is a grey shale known as the Hamilton Shale. At the base of the Devonian-aged rocks is the Marcellus Formation, which is a black organic-rich anoxic shale.

Large-scale low-angle tectonic faulting is rooted in the Marcellus Shale throughout the area. Due to its low shear strength, the Marcellus Shale acts as a preferred shear zone for this low-angle faulting. Steeper angle imbricate thrusts, ramps, and listric faults rise out of the Marcellus Shale and through the shallower rocks. The area's valley and ridge topography is a product of this process.

Professional Opinion

The vertical section in the Baird Unit 1H well that has been reviewed for recommend a cut point for the pipe and to determine whether or not the Baird Unit 1H well (API 37-111-20297) contained producing or producible formations that were going to be left behind point between the current top of cement at 5,545 feet and the recommended cut point (2,980 feet) (Figure 2). The recommended cut point is at 2,980 feet because above this point there are no further

indications of cement bond on the radial cement bond log that was run by Renegade Services on September 12, 2011 (Figure 3).

Below 2,980 feet and the top of cement at 5,545 feet in the well, three porosity zones require remedial squeeze jobs during plugging. The shallowest of these zones is at 3,518 to 3,520 feet. This two-foot zone has a maximum density porosity of 6% (Figure 4). The amplitude response on the cement bond log for the zone is between 40 and 45 mV. This indicates the presence of cement, but not a good bond (Figure 5). Therefore, a remedial cement squeeze is recommended. This should also include the zone from 3,490 to 3,510 feet immediately above the porosity because this zone has little cement across it (Figure 6). The next deepest zone is from 3,834 to 3,840 feet. This six-foot zone has a maximum density porosity of 7% (Figure 7). The amplitude response on the cement bond log over the zone is between 35 to 40 mV. This indicates the presence of cement, but not a good bond. Therefore, a remedial cement squeeze is recommended over this zone. The deepest porosity zone seen between these points is from 5,410 to 5,416 feet. This zone includes one-foot-thick beds. The upper bed has a density porosity response of 9%, and the lower one has a density porosity of 6% (Figure 8). The amplitude response on the cement bond log over this zone is between 60 and 65 mV. This indicates a poor cement bond and poor cement coverage over the zone, and it should be remediated (Figure 9).

The available logs for the Baird Unit 1H do not indicate producing or producible oil, gas, and/or water in these zones. The mudlog for the Baird pilot hole logged the highest porosity zone from 5,410 to 5,411 feet. The mudlog showed no response on the gas log (Figure 10). Therefore, it is likely that none of these zones contains significant hydrocarbons. It is from an abundance of caution that the remedial cement squeezes are recommended.

Summary of Professional Opinion

From the preceding analysis, it is the author's professional opinion that in the interval between 2,980 feet and 5,545 feet in the Baird Unit 1H, there are three zones that should have a remedial cement squeeze zone done out of an abundance of caution during the plugging procedure. These zones are from 3,518 to 3,520 feet, 3,834 to 3,840 feet, and 5,410 to 5,416 feet.



With Professional Regards,

A handwritten signature in blue ink that reads "Josh C. Hickman".

Josh Hickman, PG, MBA, M.Sc.

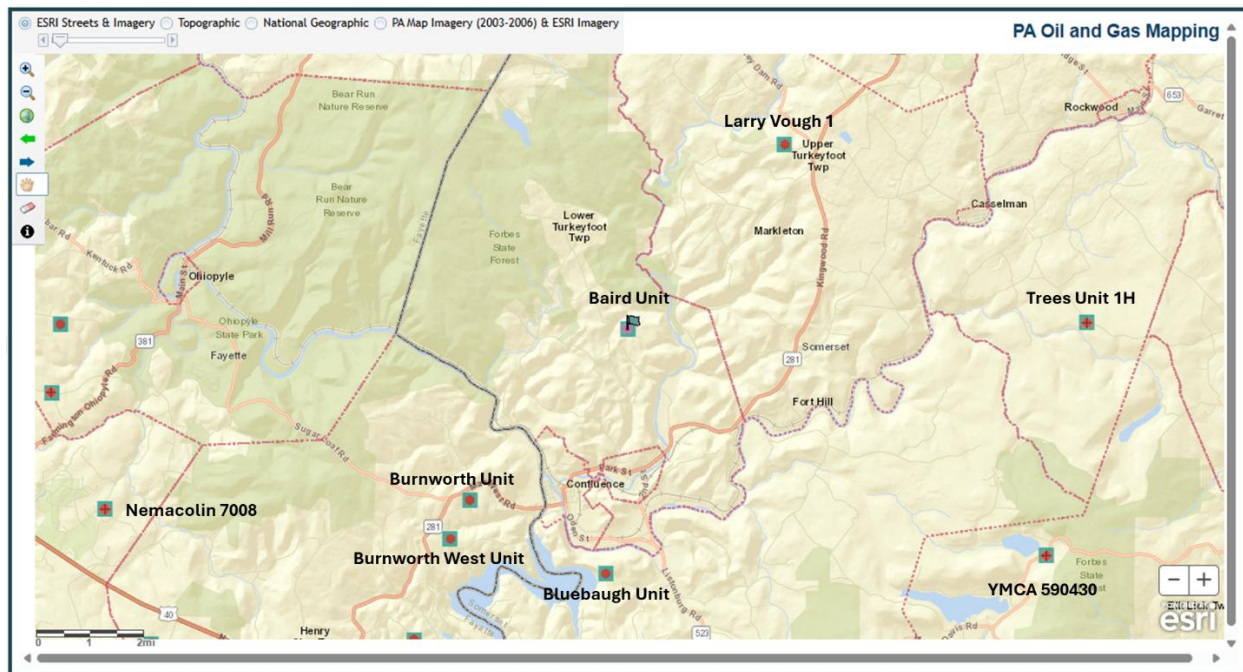


Figure 1: Map from the Pennsylvania Department of Environmental Protection showing the area around the Baird Unit 1H well. All well types (conventional and unconventional) and statuses (active, plugged, etc) are shown on this map.

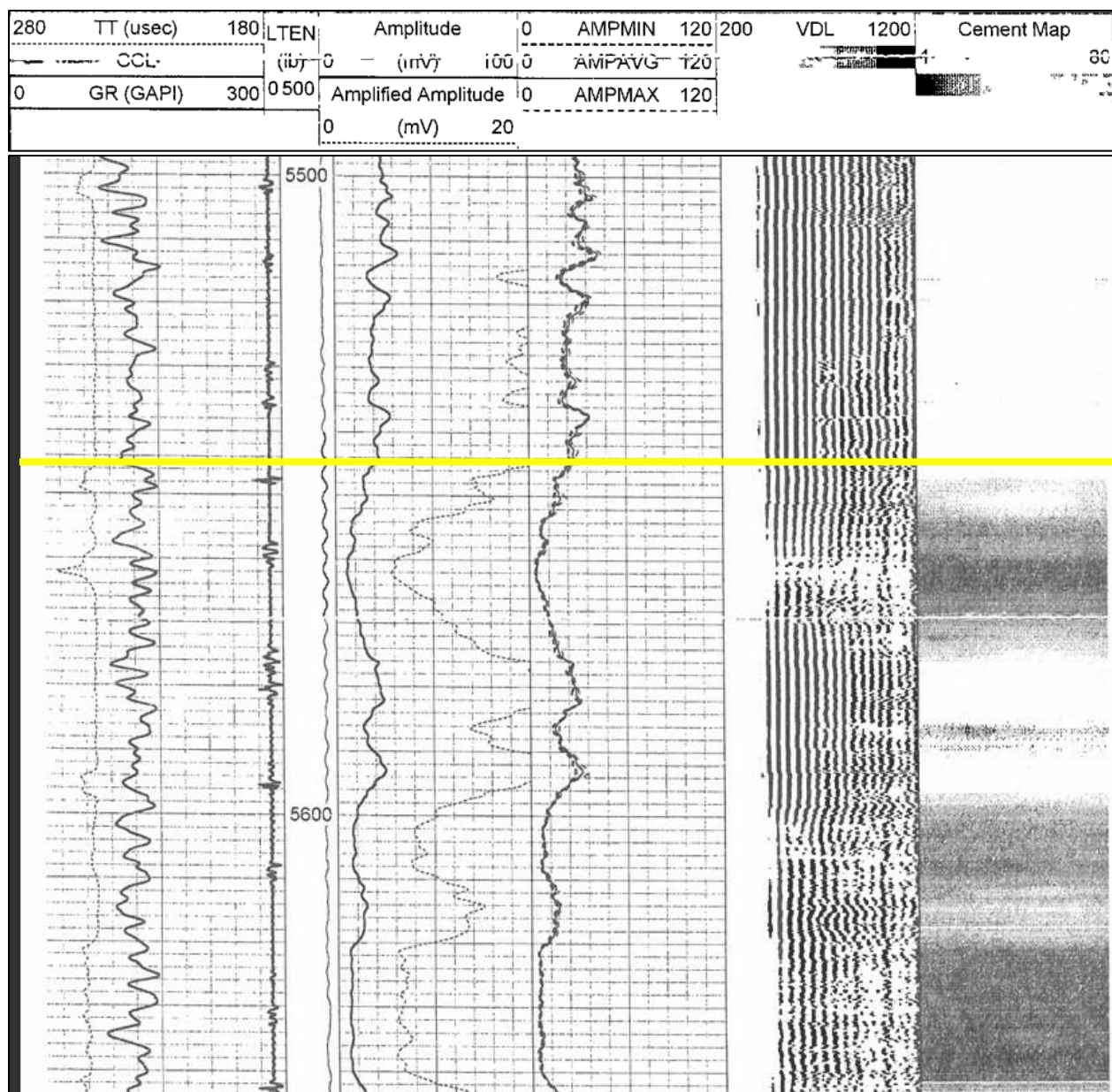


Figure 3: Radial Cement Bond Log showing the top of cement as proposed by the author at 5,545 feet. Below this point the cement bond log reads an amplitude of below 20 mV and generally below 10 mV, which indicates an excellent bond.

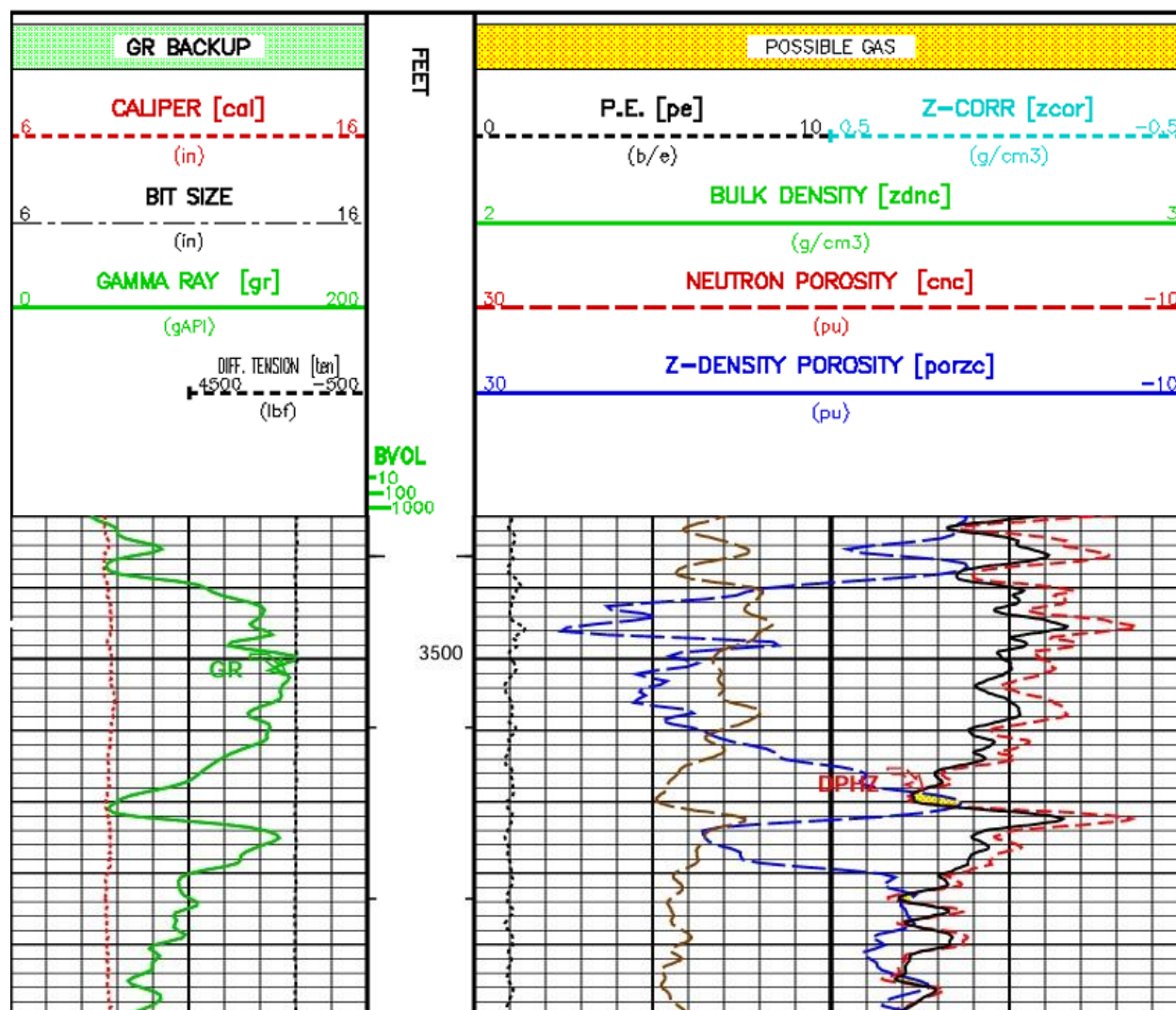


Figure 4: Porosity zone from 3,518 to 3,520 feet in the Devonian Aged rocks in the Baird Unit 1H well. The zone is a silty sand based on the response of 2.5 on the photoelectric log. A clean sand has a value of 2 on the photoelectric log, while limestone has a value of 5.

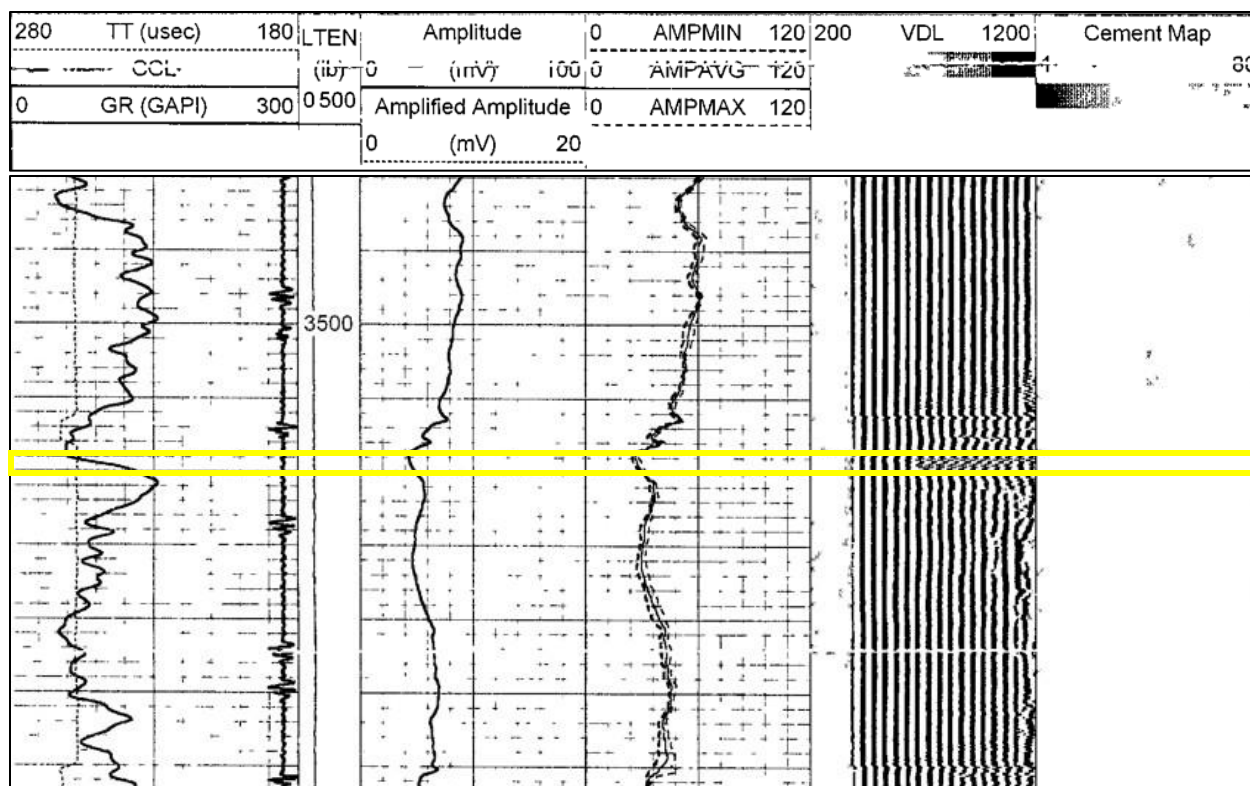


Figure 5: Radial Cement Bond Log over porosity zone from 3,518 to 3,520 feet in the Baird Unit 1H well. This zone has some cement across the zone as indicated by the Amplitude response of 20 mV. However, the bond is incomplete, and a squeeze is recommended on and above the zone at 3,500 feet.

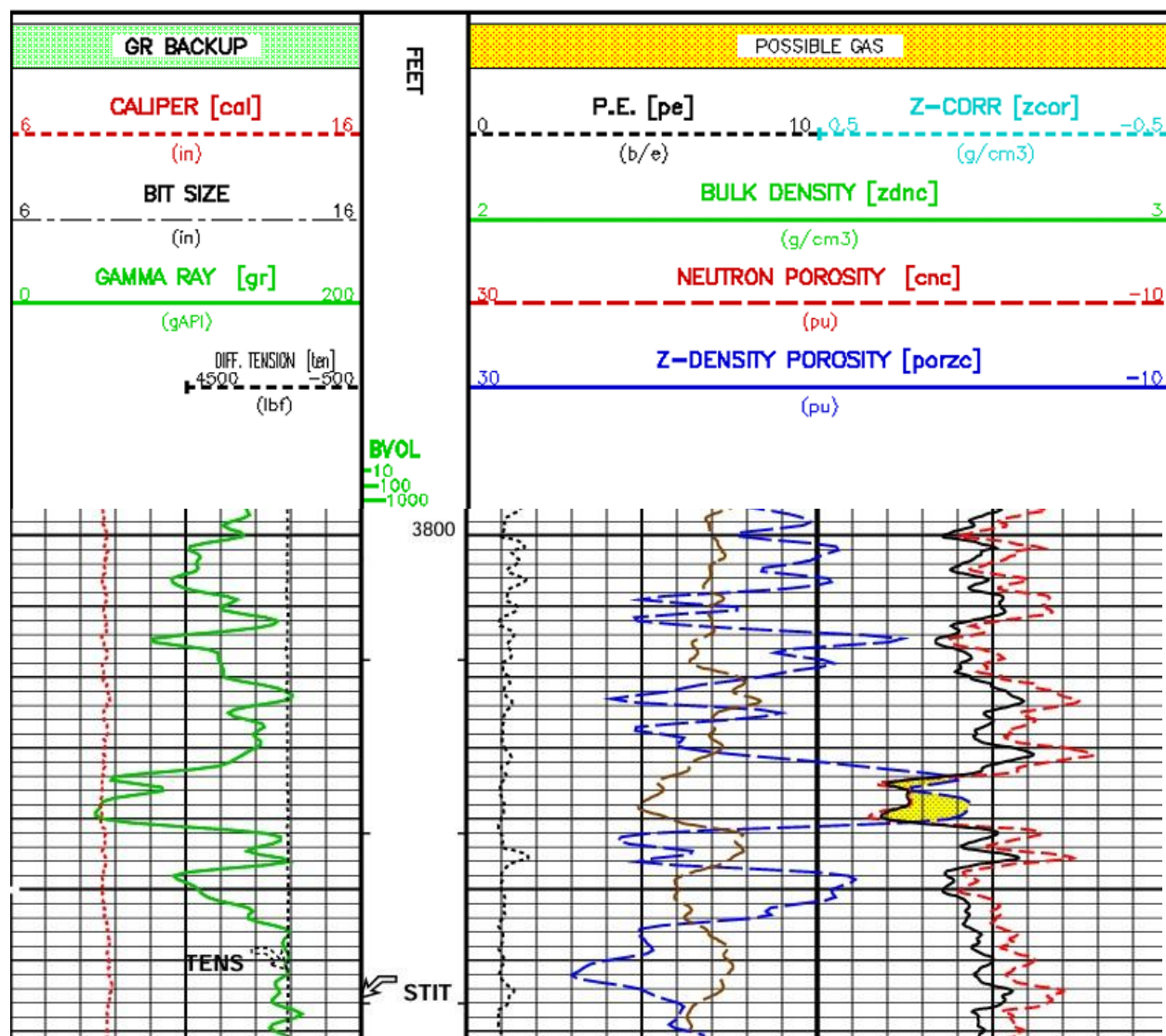


Figure 6: Porosity zone from 3,834 to 3,841 feet in the Devonian Aged rocks in the Baird Unit 1H well. The zone is a silty sand based on the response of 2.5 on the photoelectric log. A clean sand has a value of 2 on the photoelectric log, while limestone has a value of 5.

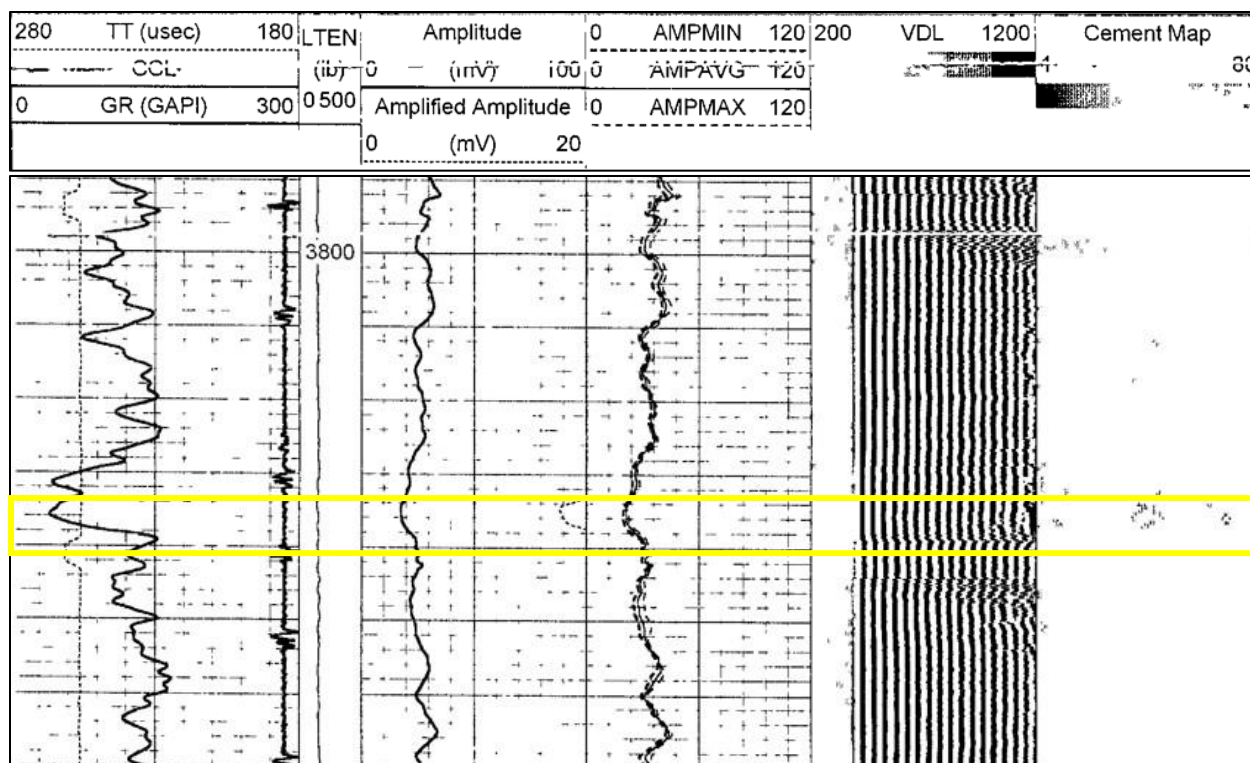


Figure 7: Radial Cement Bond Log over porosity zone from 3,834 to 3,841 feet in the Baird Unit 1H well. This zone has some cement across the zone as indicated by the Amplitude response of 20 - 25 mV. However, the bond is incomplete, and a squeeze is recommended on the zone at 3,838 feet.

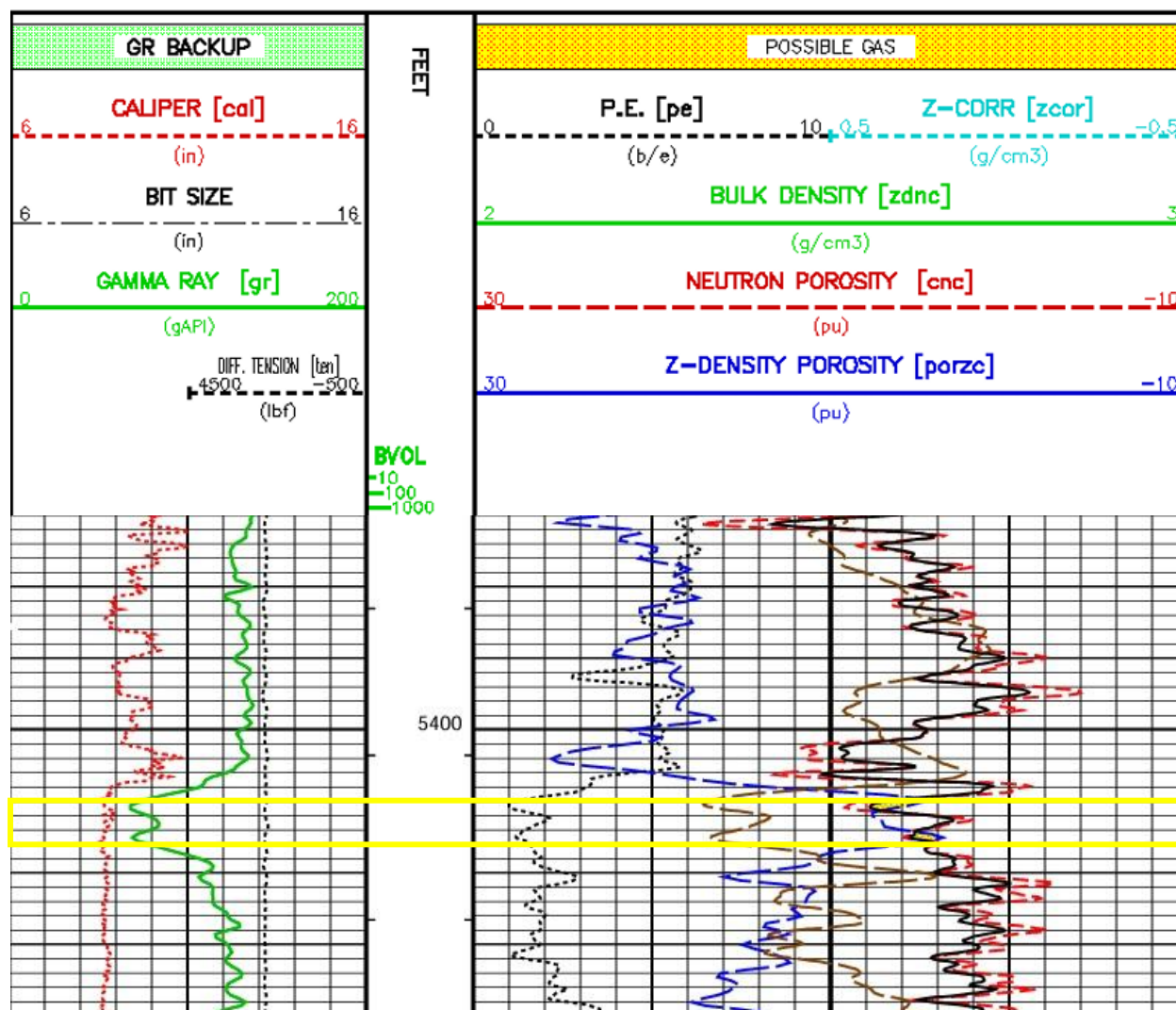


Figure 8: Porosity zone from 5,410 to 5,411 feet in the Devonian Aged rocks in the Baird Unit 1H well. The zone is a silty sand based on the response of 2.7 on the photoelectric log. A clean sand has a value of 2 on the photoelectric log, while limestone has a value of 5.

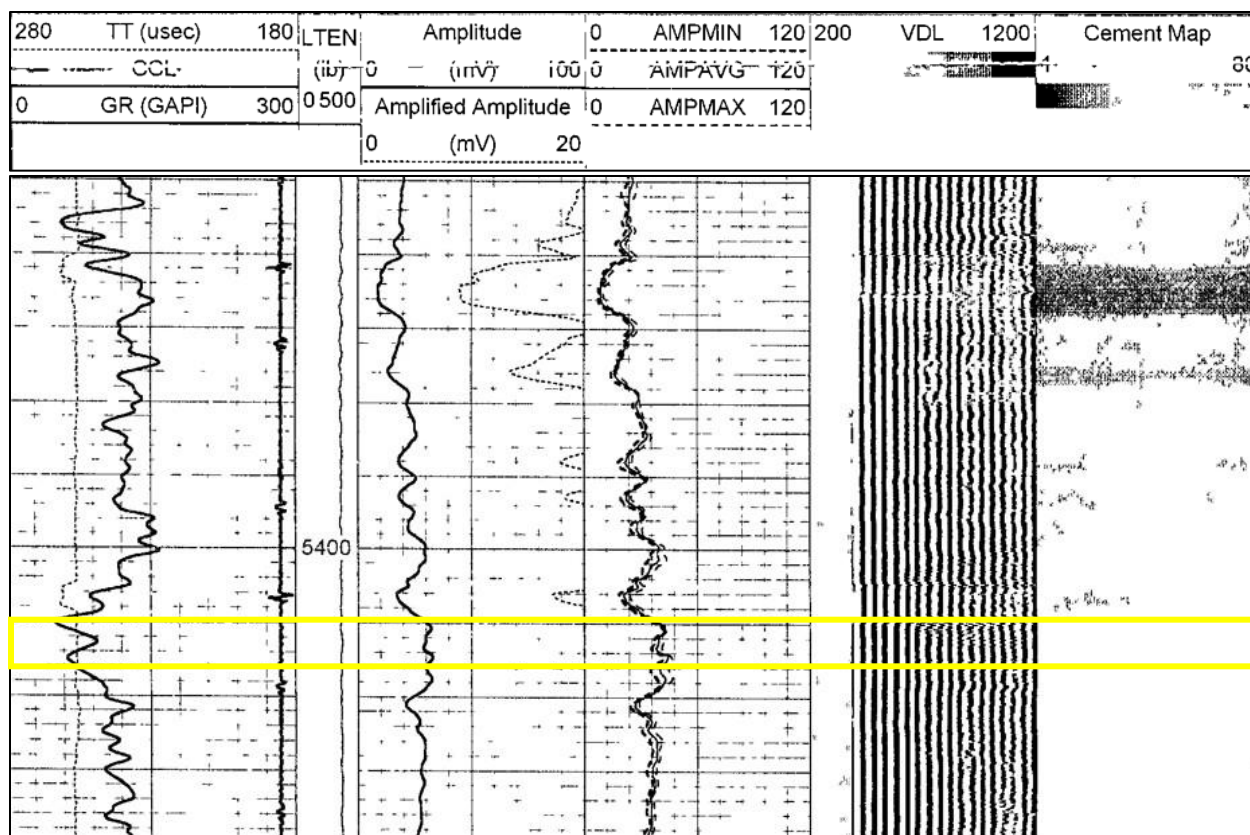


Figure 9: Radial Cement Bond Log over porosity zone from 5,410 to 5,416 feet in the Baird Unit 1H well. This zone has some cement across the zone as indicated by the Amplitude response of 30 mV. However, the bond is incomplete, and a squeeze is recommended on the zone at 5,411 feet.

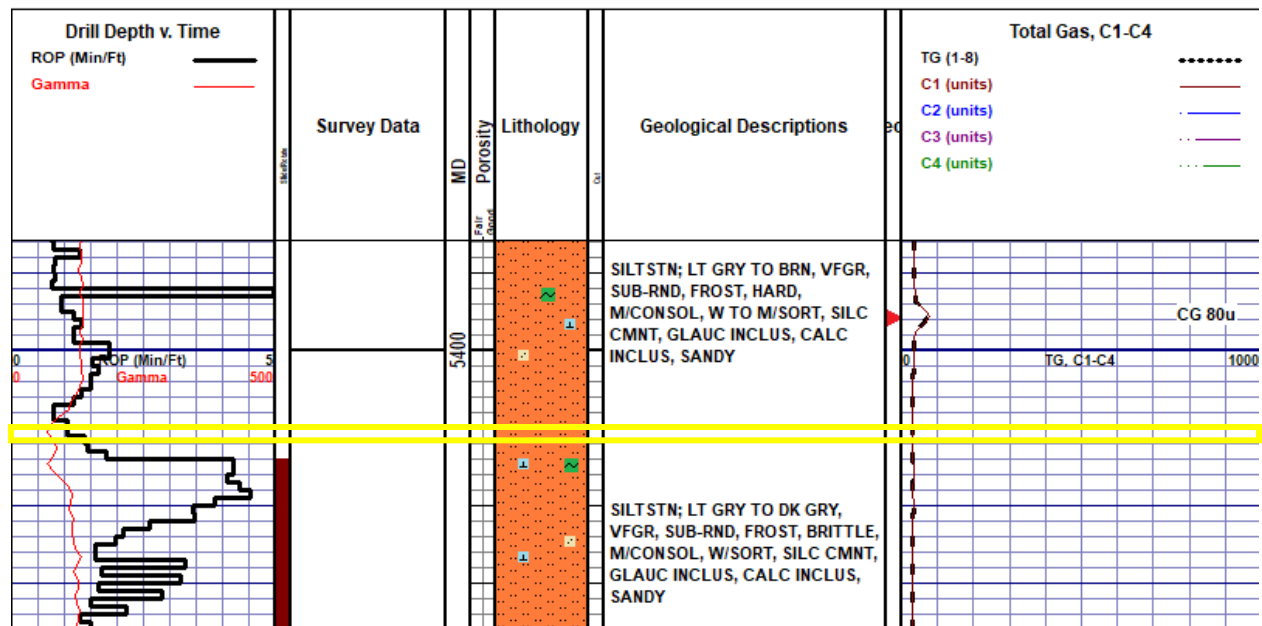
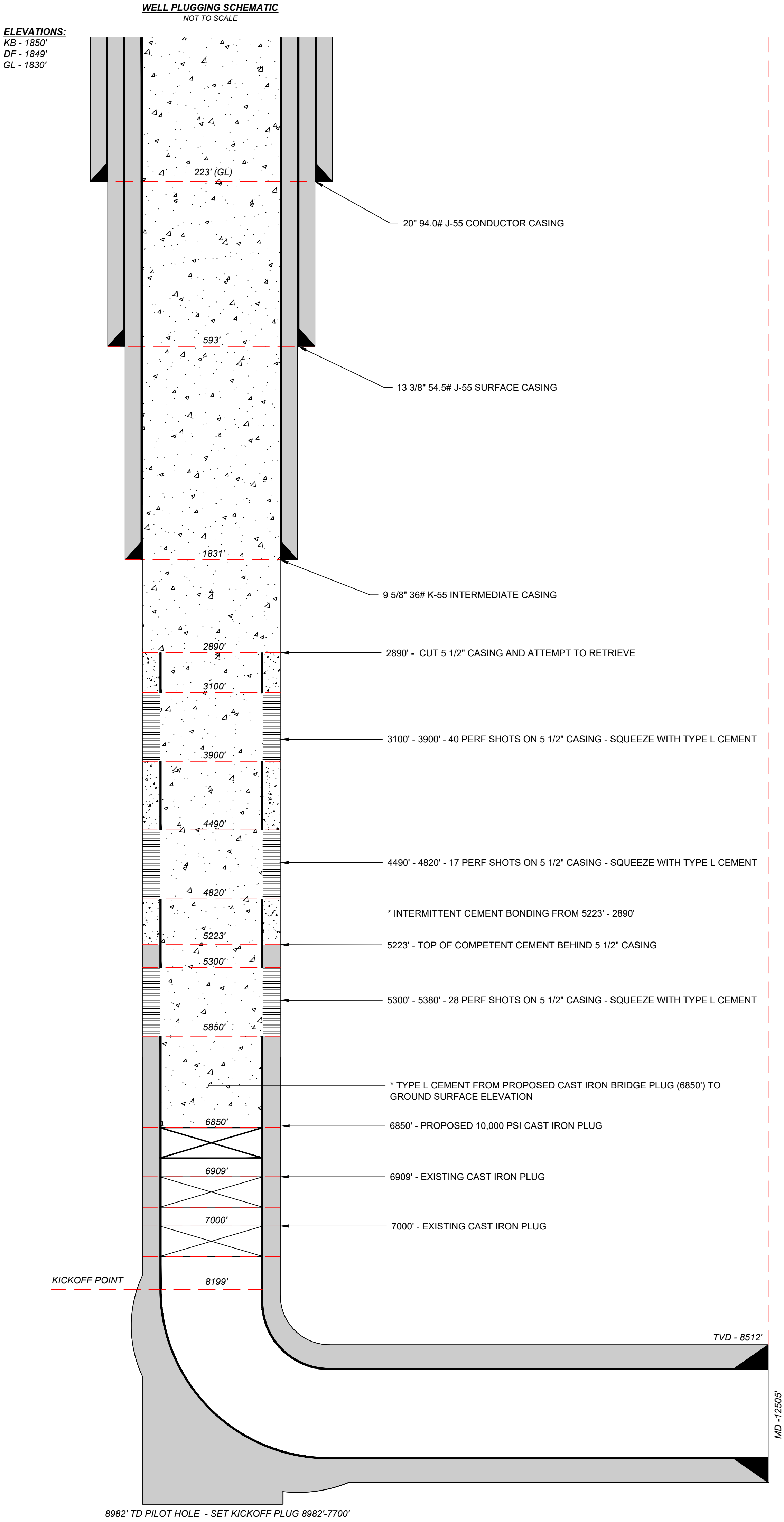


Figure 10: Pilot hole mudlog over porosity zone from 5,410 to 5,411 feet in the Baird Unit 1H well. This zone has some cement across the zone as indicated by the Amplitude response of 30 mV. However, the bond is incomplete, and a squeeze is recommended on the zone at 5,411 feet.

APPENDIX E

WELL PLUGGING SCHEMATIC



NO.	DATE	DESCRIPTION	INT.
0	2023-04-14	INITIAL SUBMISSION	JFW

SEAL

PREPARED FOR:

LPR ENERGY, LLC
P.O. BOX 192009
DALLAS, TX 75219

PREPARED BY:


MOODY AND ASSOCIATES, INC
1720 WASHINGTON RD, SUITE 100
WASHINGTON, PA 15301
724-746-5200

PROJECT ID:	25-093-JW	DRAWN:	JE
DATE:	2025-07-30	DESIGN:	JE
SCALE:	AS NOTED	CHECKED:	JW

PROJECT:

PMG - BAIRD UNIT #1H
API #1-37-111-20297

TITLE:	WELL PLUGGING SCHEMATIC		
PLAN STATUS:	PLUGGING	SHEET NO.	1 OF 1