

Sante Fe Main Office  
Phone: (505) 476-3441

General Information  
Phone: (505) 629-6116

Online Phone Directory  
<https://www.emnrd.nm.gov/ocd/contact-us>

**State of New Mexico**  
**Energy, Minerals and Natural Resources**  
**Oil Conservation Division**  
**1220 S. St Francis Dr.**  
**Santa Fe, NM 87505**

Form C-101  
August 1, 2011

Permit 402207

**APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE**

1. Operator Name and Address ARMSTRONG ENERGY CORP P.O. Box 1973 Roswell, NM 88202		2. OGRID Number 1092
4. Property Code 337847		3. API Number 30-025-55410
5. Property Name Iceman 20 State		6. Well No. 001

**7. Surface Location**

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
A	20	16S	36E	A	1109	N	996	E	Lea

**8. Proposed Bottom Hole Location**

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
A	20	16S	36E	A	823	N	1135	E	Lea

**9. Pool Information**

LOVINGTON; UPPER PENN, WEST	40750
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**Additional Well Information**

11. Work Type New Well	12. Well Type OIL	13. Cable/Rotary	14. Lease Type State	15. Ground Level Elevation 3921
16. Multiple N	17. Proposed Depth 11730	18. Formation Strawn	19. Contractor	20. Spud Date 12/15/2025
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water

☒ We will be using a closed-loop system in lieu of lined pits

**21. Proposed Casing and Cement Program**

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	12.25	9.625	40	2250	825	0
Prod	8.5	5.5	17	11730	2200	0
Prod	8.5	5.5	17	10000	2200	0
Prod	8.5	5.5	15.5	6300	2200	0
Prod	8.5	5.5	17	3800	2200	0

**Casing/Cement Program: Additional Comments**

Cement will be circulated to surface on both strings of casing.
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**22. Proposed Blowout Prevention Program**

Type	Working Pressure	Test Pressure	Manufacturer
Double Ram	5000	5000	Shaffer

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I hereby certify that no additives containing PFAS chemicals will be added to the completion or recompletion of this well. I further certify I have complied with 19.15.14.9 (A) NMAC <input checked="" type="checkbox"/> and/or 19.15.14.9 (B) NMAC <input checked="" type="checkbox"/> if applicable.  Signature:	<b>OIL CONSERVATION DIVISION</b>
Printed Name: Electronically filed by Shelby Dutton	Approved By: Jeffrey Harrison
Title: Accountant	Title: Petroleum Specialist III
Email Address: sdutton@armstrongenergycorp.com	Approved Date: 11/4/2025      Expiration Date: 11/4/2027
Date: 11/3/2025      Phone: 575-625-2222	Conditions of Approval Attached

<b>C-102</b>  Submit Electronically Via OCD Permitting	State of New Mexico Energy, Minerals & Natural Resources Department <b>OIL CONSERVATION DIVISION</b>	Revised July 9, 2024	
		Submittal Type:	<input checked="" type="checkbox"/> Initial Submittal
			<input type="checkbox"/> Amended Report
			<input type="checkbox"/> As Drilled

## WELL LOCATION INFORMATION

API Number <b>30-025-55410</b>	Pool Code <b>40750</b>	Pool Name <b>Lovington; Upper Penn, West</b>
Property Code <b>337847</b>	Property Name <b>ICEMAN 20 STATE</b>	Well Number <b>1</b>
OGRID No. <b>1092</b>	Operator Name <b>ARMSTRONG ENERGY CORPORATION</b>	Ground Level Elevation <b>3920.7'</b>
Surface Owner: <input checked="" type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input type="checkbox"/> Federal Mineral Owner: <input checked="" type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input type="checkbox"/> Federal		

## Surface Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
A	20	16-S	36-E		1109 FNL	996 FEL	32.911675°N	103.371051°W	LEA

## Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
A	20	16-S	36-E		823 FNL	1135 FEL	32.912459°N	103.371505°W	LEA

Dedicated Acres <b>40</b>	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
Order Numbers.			Well setbacks are under Common Ownership: <input type="checkbox"/> Yes <input type="checkbox"/> No	

## Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County


## First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County

## Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County

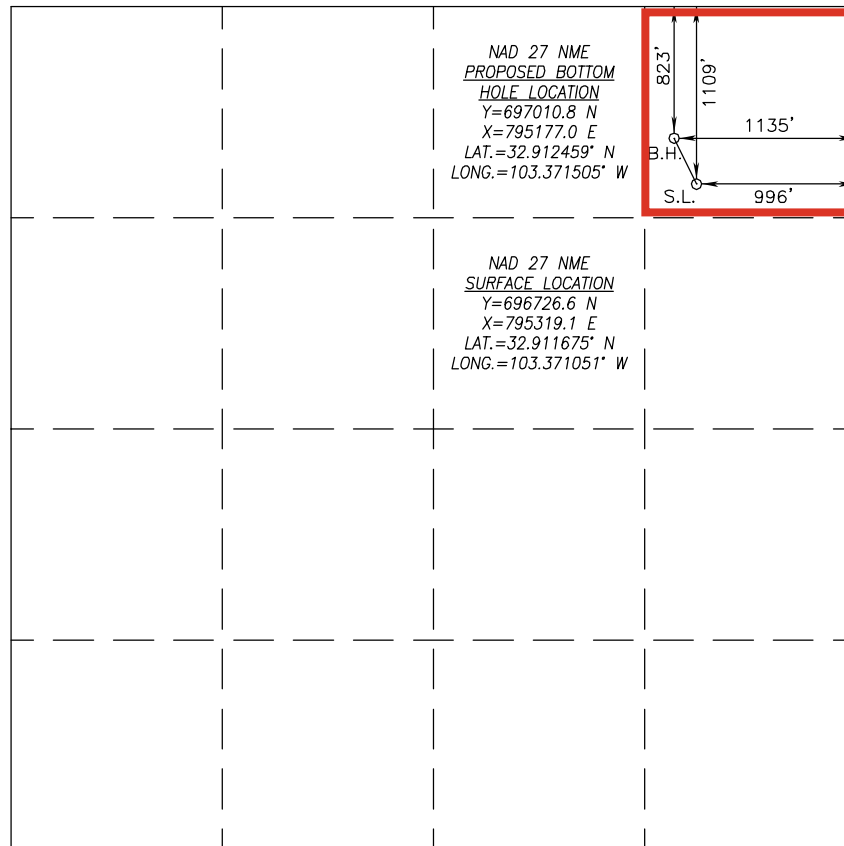
Unitized Area or Area of Uniform Interest	Spacing Unit Type <input type="checkbox"/> Horizontal <input checked="" type="checkbox"/> Vertical	Ground Floor Elevation: <b>3920.7</b>
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<b>OPERATOR CERTIFICATIONS</b>  <i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and, if the well is a vertical or directional well, that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of a working interest or unleased mineral interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</i>  <i>If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division.</i>  <i>Kyle Alpers</i> 8/26/25 Signature      Date <b>Kyle Alpers</b> Printed Name <b>kalpers@aecnm.com</b> Email Address		<b>SURVEYOR CERTIFICATIONS</b>  <i>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</i>  <i>Chad Hargrow</i> 8/20/25 Signature and Seal of Professional Surveyor  Certificate Number <b>17777</b> Date of Survey <b>DECEMBER 9, 2024</b> W.O.#24-1247    DRAWN BY: WN    PAGE 1 OF 2	
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Note: No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

This grid represents a standard section. You may superimpose a non-standard section, or larger area, over this grid. Operators must outline the dedicated acreage in a red box, clearly show the well surface location and bottom hole location, if it is directionally drilled, with the dimensions from the section lines in the cardinal directions. If this is a horizontal wellbore show on this plat the location of the First Take Point and Last Take Point, and the point within the Completed interval (other than the First Take Point or Last Take Point) that is closest to any outer boundary of the tract.

Surveyors shall use the latest United States government survey or dependent resurvey. Well locations will be in reference to the New Mexico Principal Meridian. If the land is not surveyed, contact the OCD Engineering Bureau. Independent subdivision surveys will not be acceptable.



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**1220 S. St Francis Dr.**  
**Santa Fe, NM 87505**

Form APD Conditions

Permit 402207

**PERMIT CONDITIONS OF APPROVAL**

Operator Name and Address: ARMSTRONG ENERGY CORP [1092] P.O. Box 1973 Roswell, NM 88202	API Number: 30-025-55410
	Well: Iceman 20 State #001

OCD Reviewer	Condition
jeffrey.harrison	No additives containing PFAS chemicals will be added to the drilling fluids or completion fluids used during drilling, completions, or recompletions operations.
jeffrey.harrison	All logs run on the well must be submitted to NMOCD.
jeffrey.harrison	Administrative order required for non-standard location prior to production.
jeffrey.harrison	Cement is required to circulate on both surface and production strings of casing.
jeffrey.harrison	If cement does not circulate on any string, a Cement Bond Log (CBL) is required for that string of casing.
jeffrey.harrison	A [C-103] Sub. Drilling (C-103N) is required within (10) days of spud.
jeffrey.harrison	Notify the OCD 24 hours prior to casing & cement.
jeffrey.harrison	File As Drilled C-102 and a directional Survey with C-104 completion packet.
jeffrey.harrison	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string.
jeffrey.harrison	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system.

# **ARMSTRONG ENERGY**

Lea County, NM (NAD27) NMEZ Grid

Iceman 20 State 1

Iceman 20 State 1

OH

Plan: Plan #1rev

## **Standard Planning Report**

02 September, 2025

Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Iceman 20 State 1
Company:	ARMSTRONG ENERGY	TVD Reference:	3920.7+18 @ 3938.70usft (Planning)
Project:	Lea County, NM (NAD27) NMEZ Grid	MD Reference:	3920.7+18 @ 3938.70usft (Planning)
Site:	Iceman 20 State 1	North Reference:	Grid
Well:	Iceman 20 State 1	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1rev		

Project	Lea County, NM (NAD27) NMEZ Grid		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site	Iceman 20 State 1					
Site Position:		Northing:	696,726.60 usft	Latitude:	32.9116750	
From:	Map	Easting:	795,319.00 usft	Longitude:	-103.3710509	
Position Uncertainty:		0.00 usft	Slot Radius:	13.20 in	Grid Convergence:	0.52 °

Well	Iceman 20 State 1					
Well Position	+N/-S	0.00 usft	Northing:	696,726.60 usft	Latitude:	32.9116750
	+E/-W	0.00 usft	Easting:	795,319.00 usft	Longitude:	-103.3710509
Position Uncertainty		0.00 usft	Wellhead Elevation:		Ground Level:	3,920.70 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	User Defined	09/02/25	6.19	60.40	47,420.20000000

Design	Plan #1rev			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	333.43

Plan Survey Tool Program	Date	09/02/25		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	11,742.00	Plan #1rev (OH)	

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,350.00	0.00	0.00	2,350.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,799.59	4.50	333.43	2,799.13	15.77	-7.88	1.00	1.00	0.00	333.43	
6,400.41	4.50	333.43	6,388.87	268.23	-134.12	0.00	0.00	0.00	0.00	
6,850.00	0.00	0.00	6,838.00	284.00	-142.00	1.00	-1.00	0.00	180.00	
11,742.00	0.00	0.00	11,730.00	284.00	-142.00	0.00	0.00	0.00	0.00	Iceman 20 State 1 PB

## Planning Report

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well Iceman 20 State 1
<b>Company:</b>	ARMSTRONG ENERGY	<b>TVD Reference:</b>	3920.7+18 @ 3938.70usft (Planning)
<b>Project:</b>	Lea County, NM (NAD27) NMEZ Grid	<b>MD Reference:</b>	3920.7+18 @ 3938.70usft (Planning)
<b>Site:</b>	Iceman 20 State 1	<b>North Reference:</b>	Grid
<b>Well:</b>	Iceman 20 State 1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan #1rev		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,250.00	0.00	0.00	2,250.00	0.00	0.00	0.00	0.00	0.00	0.00
9 5/8"									
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,350.00	0.00	0.00	2,350.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.50	333.43	2,400.00	0.20	-0.10	0.22	1.00	1.00	0.00
2,500.00	1.50	333.43	2,499.98	1.76	-0.88	1.96	1.00	1.00	0.00
2,600.00	2.50	333.43	2,599.92	4.88	-2.44	5.45	1.00	1.00	0.00
2,700.00	3.50	333.43	2,699.78	9.56	-4.78	10.69	1.00	1.00	0.00
2,799.59	4.50	333.43	2,799.13	15.77	-7.88	17.63	1.00	1.00	0.00
2,900.00	4.50	333.43	2,899.23	22.81	-11.40	25.50	0.00	0.00	0.00
3,000.00	4.50	333.43	2,998.92	29.82	-14.91	33.34	0.00	0.00	0.00
3,100.00	4.50	333.43	3,098.61	36.83	-18.42	41.18	0.00	0.00	0.00
3,200.00	4.50	333.43	3,198.31	43.84	-21.92	49.02	0.00	0.00	0.00
3,300.00	4.50	333.43	3,298.00	50.85	-25.43	56.86	0.00	0.00	0.00
3,400.00	4.50	333.43	3,397.69	57.87	-28.93	64.70	0.00	0.00	0.00
3,500.00	4.50	333.43	3,497.38	64.88	-32.44	72.53	0.00	0.00	0.00
3,600.00	4.50	333.43	3,597.08	71.89	-35.94	80.37	0.00	0.00	0.00
3,700.00	4.50	333.43	3,696.77	78.90	-39.45	88.21	0.00	0.00	0.00
3,800.00	4.50	333.43	3,796.46	85.91	-42.96	96.05	0.00	0.00	0.00
3,900.00	4.50	333.43	3,896.15	92.92	-46.46	103.89	0.00	0.00	0.00
4,000.00	4.50	333.43	3,995.85	99.93	-49.97	111.73	0.00	0.00	0.00
4,100.00	4.50	333.43	4,095.54	106.94	-53.47	119.57	0.00	0.00	0.00
4,200.00	4.50	333.43	4,195.23	113.95	-56.98	127.41	0.00	0.00	0.00
4,300.00	4.50	333.43	4,294.92	120.97	-60.48	135.24	0.00	0.00	0.00
4,400.00	4.50	333.43	4,394.61	127.98	-63.99	143.08	0.00	0.00	0.00
4,500.00	4.50	333.43	4,494.31	134.99	-67.49	150.92	0.00	0.00	0.00
4,600.00	4.50	333.43	4,594.00	142.00	-71.00	158.76	0.00	0.00	0.00
4,700.00	4.50	333.43	4,693.69	149.01	-74.51	166.60	0.00	0.00	0.00
4,800.00	4.50	333.43	4,793.38	156.02	-78.01	174.44	0.00	0.00	0.00
4,900.00	4.50	333.43	4,893.08	163.03	-81.52	182.28	0.00	0.00	0.00
5,000.00	4.50	333.43	4,992.77	170.04	-85.02	190.12	0.00	0.00	0.00

## Planning Report

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well Iceman 20 State 1
<b>Company:</b>	ARMSTRONG ENERGY	<b>TVD Reference:</b>	3920.7+18 @ 3938.70usft (Planning)
<b>Project:</b>	Lea County, NM (NAD27) NMEZ Grid	<b>MD Reference:</b>	3920.7+18 @ 3938.70usft (Planning)
<b>Site:</b>	Iceman 20 State 1	<b>North Reference:</b>	Grid
<b>Well:</b>	Iceman 20 State 1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan #1rev		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
5,100.00	4.50	333.43	5,092.46	177.06	-88.53	197.95	0.00	0.00	0.00	
5,200.00	4.50	333.43	5,192.15	184.07	-92.03	205.79	0.00	0.00	0.00	
5,300.00	4.50	333.43	5,291.84	191.08	-95.54	213.63	0.00	0.00	0.00	
5,400.00	4.50	333.43	5,391.54	198.09	-99.04	221.47	0.00	0.00	0.00	
5,500.00	4.50	333.43	5,491.23	205.10	-102.55	229.31	0.00	0.00	0.00	
5,600.00	4.50	333.43	5,590.92	212.11	-106.06	237.15	0.00	0.00	0.00	
5,700.00	4.50	333.43	5,690.61	219.12	-109.56	244.99	0.00	0.00	0.00	
5,800.00	4.50	333.43	5,790.31	226.13	-113.07	252.83	0.00	0.00	0.00	
5,900.00	4.50	333.43	5,890.00	233.15	-116.57	260.67	0.00	0.00	0.00	
6,000.00	4.50	333.43	5,989.69	240.16	-120.08	268.50	0.00	0.00	0.00	
6,100.00	4.50	333.43	6,089.38	247.17	-123.58	276.34	0.00	0.00	0.00	
6,200.00	4.50	333.43	6,189.08	254.18	-127.09	284.18	0.00	0.00	0.00	
6,300.00	4.50	333.43	6,288.77	261.19	-130.60	292.02	0.00	0.00	0.00	
6,400.41	4.50	333.43	6,388.87	268.23	-134.12	299.89	0.00	0.00	0.00	
6,500.00	3.50	333.43	6,488.22	274.44	-137.22	306.83	1.00	-1.00	0.00	
6,600.00	2.50	333.43	6,588.08	279.12	-139.56	312.07	1.00	-1.00	0.00	
6,700.00	1.50	333.43	6,688.01	282.24	-141.12	315.56	1.00	-1.00	0.00	
6,800.00	0.50	333.43	6,788.00	283.80	-141.90	317.30	1.00	-1.00	0.00	
6,850.00	0.00	0.00	6,838.00	284.00	-142.00	317.52	1.00	-1.00	0.00	
6,900.00	0.00	0.00	6,888.00	284.00	-142.00	317.52	0.00	0.00	0.00	
7,000.00	0.00	0.00	6,988.00	284.00	-142.00	317.52	0.00	0.00	0.00	
7,100.00	0.00	0.00	7,088.00	284.00	-142.00	317.52	0.00	0.00	0.00	
7,200.00	0.00	0.00	7,188.00	284.00	-142.00	317.52	0.00	0.00	0.00	
7,300.00	0.00	0.00	7,288.00	284.00	-142.00	317.52	0.00	0.00	0.00	
7,400.00	0.00	0.00	7,388.00	284.00	-142.00	317.52	0.00	0.00	0.00	
7,500.00	0.00	0.00	7,488.00	284.00	-142.00	317.52	0.00	0.00	0.00	
7,600.00	0.00	0.00	7,588.00	284.00	-142.00	317.52	0.00	0.00	0.00	
7,700.00	0.00	0.00	7,688.00	284.00	-142.00	317.52	0.00	0.00	0.00	
7,800.00	0.00	0.00	7,788.00	284.00	-142.00	317.52	0.00	0.00	0.00	
7,900.00	0.00	0.00	7,888.00	284.00	-142.00	317.52	0.00	0.00	0.00	
8,000.00	0.00	0.00	7,988.00	284.00	-142.00	317.52	0.00	0.00	0.00	
8,100.00	0.00	0.00	8,088.00	284.00	-142.00	317.52	0.00	0.00	0.00	
8,200.00	0.00	0.00	8,188.00	284.00	-142.00	317.52	0.00	0.00	0.00	
8,300.00	0.00	0.00	8,288.00	284.00	-142.00	317.52	0.00	0.00	0.00	
8,400.00	0.00	0.00	8,388.00	284.00	-142.00	317.52	0.00	0.00	0.00	
8,500.00	0.00	0.00	8,488.00	284.00	-142.00	317.52	0.00	0.00	0.00	
8,600.00	0.00	0.00	8,588.00	284.00	-142.00	317.52	0.00	0.00	0.00	
8,700.00	0.00	0.00	8,688.00	284.00	-142.00	317.52	0.00	0.00	0.00	
8,800.00	0.00	0.00	8,788.00	284.00	-142.00	317.52	0.00	0.00	0.00	
8,900.00	0.00	0.00	8,888.00	284.00	-142.00	317.52	0.00	0.00	0.00	
9,000.00	0.00	0.00	8,988.00	284.00	-142.00	317.52	0.00	0.00	0.00	
9,100.00	0.00	0.00	9,088.00	284.00	-142.00	317.52	0.00	0.00	0.00	
9,200.00	0.00	0.00	9,188.00	284.00	-142.00	317.52	0.00	0.00	0.00	
9,300.00	0.00	0.00	9,288.00	284.00	-142.00	317.52	0.00	0.00	0.00	
9,400.00	0.00	0.00	9,388.00	284.00	-142.00	317.52	0.00	0.00	0.00	
9,500.00	0.00	0.00	9,488.00	284.00	-142.00	317.52	0.00	0.00	0.00	
9,600.00	0.00	0.00	9,588.00	284.00	-142.00	317.52	0.00	0.00	0.00	
9,700.00	0.00	0.00	9,688.00	284.00	-142.00	317.52	0.00	0.00	0.00	
9,800.00	0.00	0.00	9,788.00	284.00	-142.00	317.52	0.00	0.00	0.00	
9,900.00	0.00	0.00	9,888.00	284.00	-142.00	317.52	0.00	0.00	0.00	
10,000.00	0.00	0.00	9,988.00	284.00	-142.00	317.52	0.00	0.00	0.00	
10,100.00	0.00	0.00	10,088.00	284.00	-142.00	317.52	0.00	0.00	0.00	
10,200.00	0.00	0.00	10,188.00	284.00	-142.00	317.52	0.00	0.00	0.00	



Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Iceman 20 State 1
Company:	ARMSTRONG ENERGY	TVD Reference:	3920.7+18 @ 3938.70usft (Planning)
Project:	Lea County, NM (NAD27) NMEZ Grid	MD Reference:	3920.7+18 @ 3938.70usft (Planning)
Site:	Iceman 20 State 1	North Reference:	Grid
Well:	Iceman 20 State 1	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1rev		

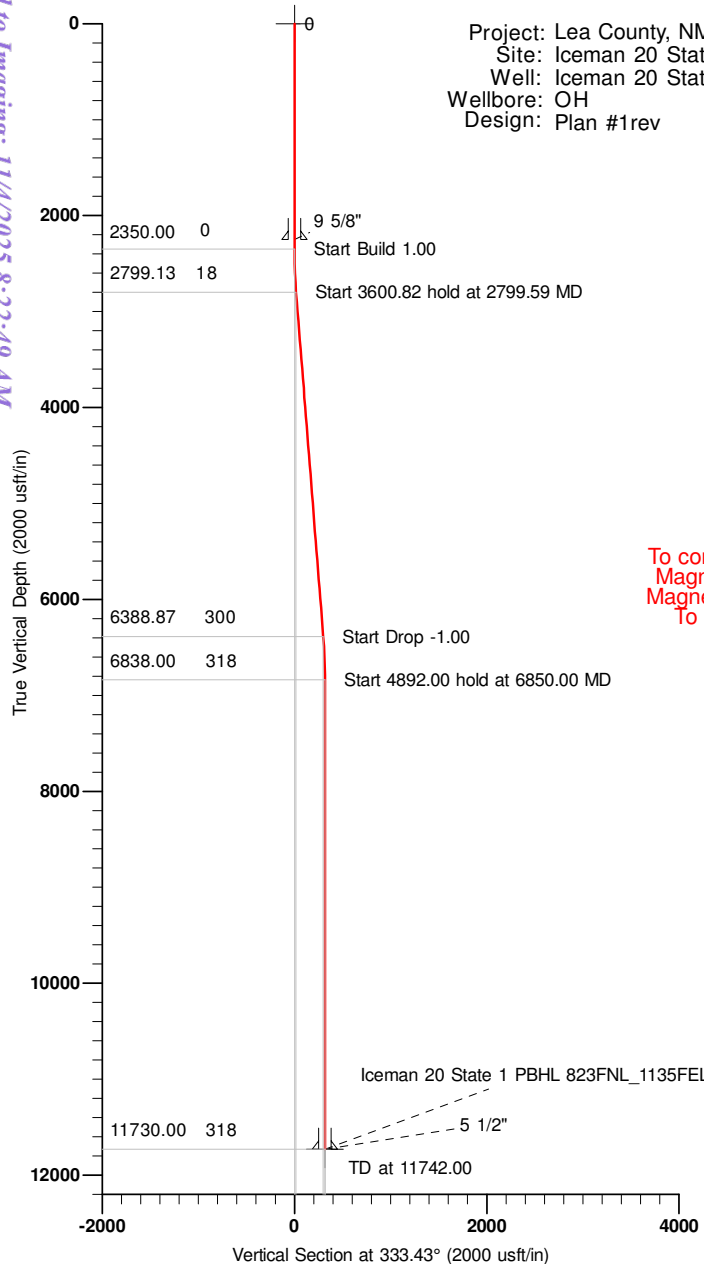
Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
10,300.00	0.00	0.00	10,288.00	284.00	-142.00	317.52	0.00	0.00	0.00	
10,400.00	0.00	0.00	10,388.00	284.00	-142.00	317.52	0.00	0.00	0.00	
10,500.00	0.00	0.00	10,488.00	284.00	-142.00	317.52	0.00	0.00	0.00	
10,600.00	0.00	0.00	10,588.00	284.00	-142.00	317.52	0.00	0.00	0.00	
10,700.00	0.00	0.00	10,688.00	284.00	-142.00	317.52	0.00	0.00	0.00	
10,800.00	0.00	0.00	10,788.00	284.00	-142.00	317.52	0.00	0.00	0.00	
10,900.00	0.00	0.00	10,888.00	284.00	-142.00	317.52	0.00	0.00	0.00	
11,000.00	0.00	0.00	10,988.00	284.00	-142.00	317.52	0.00	0.00	0.00	
11,100.00	0.00	0.00	11,088.00	284.00	-142.00	317.52	0.00	0.00	0.00	
11,200.00	0.00	0.00	11,188.00	284.00	-142.00	317.52	0.00	0.00	0.00	
11,300.00	0.00	0.00	11,288.00	284.00	-142.00	317.52	0.00	0.00	0.00	
11,400.00	0.00	0.00	11,388.00	284.00	-142.00	317.52	0.00	0.00	0.00	
11,500.00	0.00	0.00	11,488.00	284.00	-142.00	317.52	0.00	0.00	0.00	
11,600.00	0.00	0.00	11,588.00	284.00	-142.00	317.52	0.00	0.00	0.00	
11,700.00	0.00	0.00	11,688.00	284.00	-142.00	317.52	0.00	0.00	0.00	
11,742.00	0.00	0.00	11,730.00	284.00	-142.00	317.52	0.00	0.00	0.00	
5 1/2"										

Design Targets										
Target Name										
- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude		Longitude
- Shape										
Iceman 20 State 1 SHL	0.00	0.00	0.00	0.00	0.00	696,726.60	795,319.00	32.9116750		-103.3710509
- plan hits target center										
- Point										
Iceman 20 State 1 PBHL	0.00	0.00	11,730.00	284.20	-142.00	697,010.80	795,177.00	32.9124596		-103.3715051
- plan misses target center by 0.20usft at 11742.00usft MD (11730.00 TVD, 284.00 N, -142.00 E)										
- Point										

Casing Points						
Measured Depth (usft)	Vertical Depth (usft)	Name			Casing Diameter (in)	Hole Diameter (in)
2,250.00	2,250.00	9 5/8"			9.62	12.25
11,742.00	11,730.00	5 1/2"			5.50	6.00

# ARMSTRONG ENERGY

Project: Lea County, NM (NAD27) NMEZ Grid  
 Site: Iceman 20 State 1  
 Well: Iceman 20 State 1  
 Wellbore: OH  
 Design: Plan #1rev



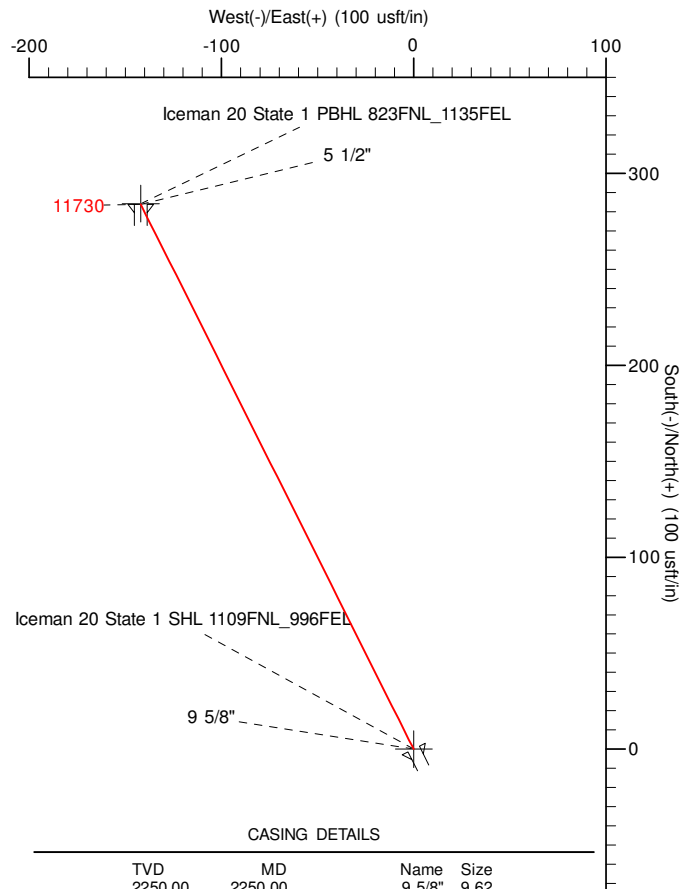
3920.7+18 @ 3938.70usft (Planning)  
 NAD 1927 (NADCON CONUS)  
 US State Plane 1927 (Exact solution)  
 New Mexico East 3001



Azimuths to Grid North  
 True North: -0.52°  
 Magnetic North: 5.67°

Magnetic Field  
 Strength: 47420.2nT  
 Dip Angle: 60.40°  
 Date: 09/02/2025  
 Model: NOAA IGRF2025

To convert a Magnetic Direction to a True Direction, Add 6.19° East  
 Magnetic North is 6.19° East of True North (Magnetic Declination)  
 Magnetic North is 5.67° East of Grid North (Magnetic Convergence)  
 To convert a Magnetic Direction to a Grid Direction, Add 5.67°



## CASING DETAILS

TVD	MD	Name	Size
2250.00	2250.00	9 5/8"	9.62
11730.00	11742.00	5 1/2"	5.50

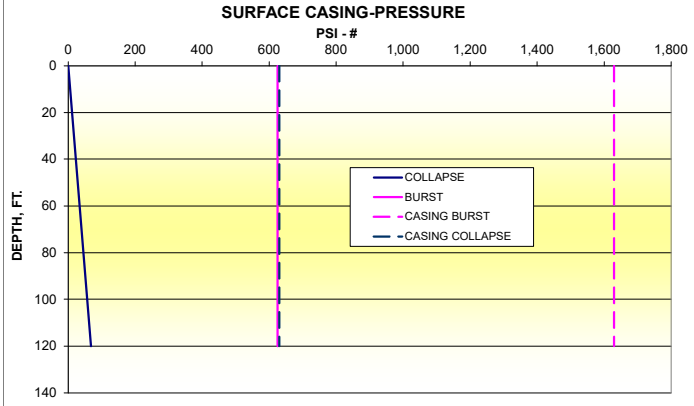
## TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
Iceman 20 State 1 SHL 1109FNL_996FEL	0.00	0.00	0.00	696726.60	795319.00	Point
Iceman 20 State 1 PBHL 823FNL_1135FEL	11730.00	284.20	-142.00	697010.80	795177.00	Point

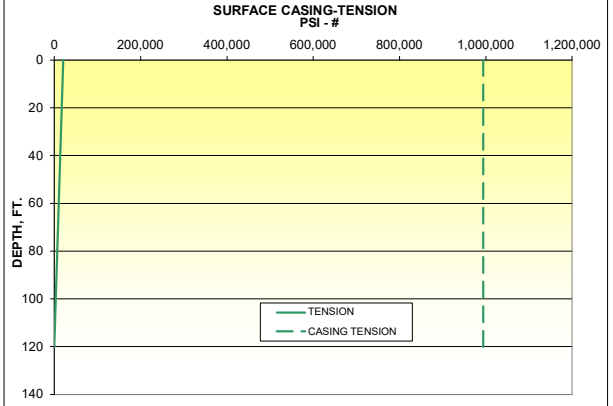
## SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	2350.00	0.00	0.00	2350.00	0.00	0.00	0.00	0.00	0.00	
3	2799.59	4.50	333.43	2799.13	15.77	-7.88	1.00	333.43	17.63	
4	6400.41	4.50	333.43	6388.87	268.23	-134.12	0.00	0.00	299.89	
5	6850.00	0.00	0.00	6838.00	284.00	-142.00	1.00	180.00	317.52	
6	11742.00	0.00	0.00	11730.00	284.00	-142.00	0.00	0.00	317.52	Iceman 20 State 1 PBHL 823FNL_1135FEL

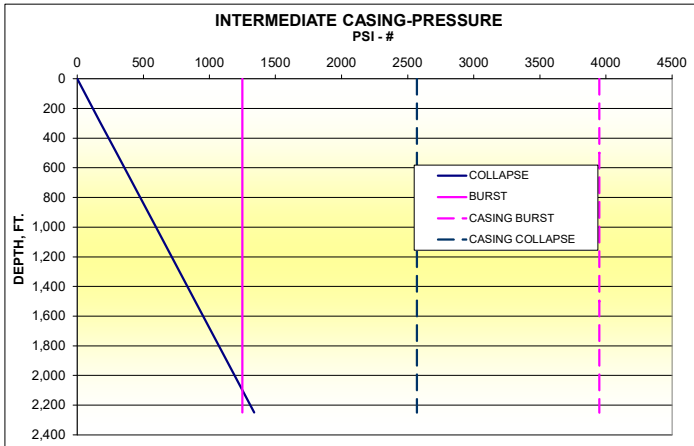
CONDUCTOR CASING						SHALLOWEST		DEEPEST		MAX. DESIGN	
SIZE	WEIGHT	THREAD	GRADE	BURST	COLLAPSE	TENSION	DEPTH	DEPTH	MUD WT.	PRESSURE	
20"	94	ST&C	H-40	1630	630	994,000	0	120	9.70	500	
COLLAR O.D.				I.D.		DRIFT					
20"	94	ST&C	J-55	14.375		12.515	12.359				



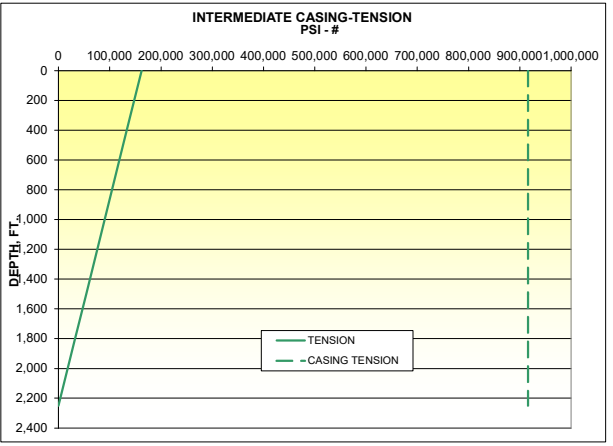
DESIGN				DESIGN				CASING PROPERTIES		
DEPTH	S.F.	S.F.	S.F.	BURST	COLLAPSE	TENSION		BURST	COLLAPSE	TENSION
0	1.25	1.125	1.8	625	0	20,304		1630	630	994,000
120	1.25	1.125	1.8	625	68	0				



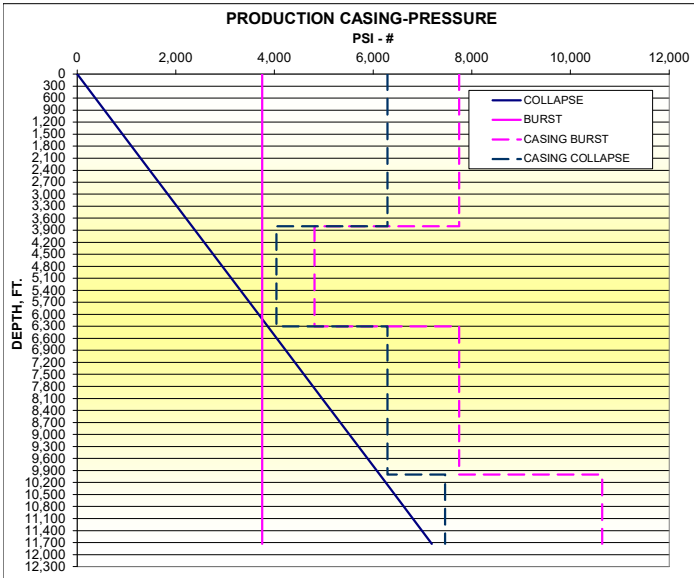
SURFACE CASING							SHALLOWEST	DEEPEST	MAX. DESIGN	
SIZE	WEIGHT	THREAD	GRADE	BURST	COLLAPSE	TENSION	DEPTH	DEPTH	MUD WT.	PRESSURE
9 5/8"	40	LT&C	J-55	3950	2570	916,000	0	500	10.20	1000
9 5/8"	40	LT&C	J-55	3950	2570	916,000	500	1500	10.20	1000
9 5/8"	40	LT&C	J-55	3950	2570	916,000	1500	2250	10.20	1000
COLLAR O.D.						I.D.	DRIFT			
9 5/8"	40	LT&C	J-55	10.625		8.835		8.679		



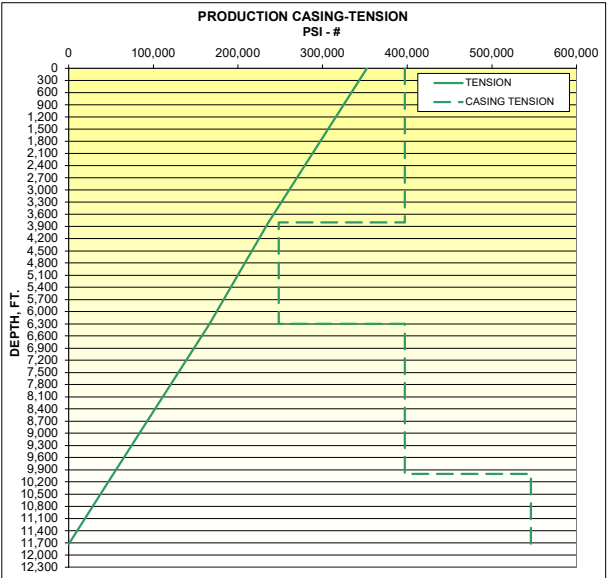
DESIGN				DESIGN				CASING PROPERTIES		
DEPTH	S.F.	S.F.	S.F.	BURST	COLLAPSE	TENSION		BURST	COLLAPSE	TENSION
0	1.25	1.125	1.80	1250	0	162,000		3,950	2,570	916,000
500	1.25	1.125	1.80	1250	298	126,000		3,950	2,570	916,000
1500	1.25	1.125	1.80	1250	893	54,000		3,950	2,570	916,000
2250	1.25	1.125	1.80	1250	1340	0		3,950	2,570	916,000



PRODUCTION CASING				SHALLOWEST				DEEPEST	MAX. DESIGN	
SIZE	WEIGHT	THREAD	GRADE	BURST	COLLAPSE	TENSION	DEPTH	DEPTH	MUD WT.	PRESSURE
5 1/2"	17	LT&C	L80	7740	6290	397,000	0	3800	10.50	3000
5 1/2"	15.5	LT&C	J-55	4810	4040	248,000	3800	6300	10.50	3000
5 1/2"	17	LT&C	L80	7740	6290	397,000	6300	10000	10.50	3000
5 1/2"	17	LT&C	P-110	10640	7460	546,000	10000	11730	10.50	3000
COLLAR O.D.				I.D.		DRIFT				
5 1/2"	17	LT&C	HCL-80	6.05		4.892	4.767			
5 1/2"	20	LT&C	HCP-110	6.05		4.778	4.653			



DESIGN				DESIGN				CASING PROPERTIES		
DEPTH	S.F.	S.F.	S.F.	BURST	COLLAPSE	TENSION		BURST	COLLAPSE	TENSION
0	1.25	1.125	1.80	3,750	0	352,188		7,740	6,290	397,000
3,800	1.25	1.125	1.80	3,750	2,330	235,908		7,740	6,290	397,000
3,800	1.25	1.125	1.80	3,750	2,330	235,908		4,810	4,040	248,000
6,300	1.25	1.125	1.80	3,750	3,862	166,158		4,810	4,040	248,000
6,300	1.25	1.125	1.80	3,750	3,862	166,158		7,740	6,290	397,000
10,000	1.25	1.125	1.80	3,750	6,131	52,938		7,740	6,290	397,000
10,000	1.25	1.125	1.80	3,750	6,131	52,938		10,640	7,460	546,000
11,730	1.25	1.125	1.80	3,750	7,191	0		10,640	7,460	546,000



**NATURAL GAS MANAGEMENT PLAN ATTACHMENTS:**

*VI: Description of how Armstrong Energy Corporation will size separation equipment to optimize gas capture.*

Armstrong Energy Corporation will utilize a separator of sufficient size to allow adequate retention time of the production stream for separation of gas and fluids based on the lowest possible operating pressure determined by the gas sales line pressure downstream of the vessel. The separator size determination will be made either by typical engineering calculations or operational experience. By operating the separator at the lowest operable pressure AEC will ensure maximum capture of produced gas for sales into the pipeline. Should the line pressure downstream of the separator be too high to ensure good separation, AEC has the ability to utilize low suction pressure compressors to aid in separation and gas capture where applicable.

*VII: Descriptions of the actions Armstrong Energy Corporation will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC*

- A. Armstrong Energy Corporation will maximize the recovery of natural gas by minimizing waste of natural gas through venting and flaring. AEC will ensure that our wells will be connected to a natural gas gathering system with sufficient capacity to transport 100% of the produced natural gas. Should a natural gas gathering system be unfeasible, an alternative beneficial use will be found for the gas.
- B. All drilling operations will be equipped with a properly sized flare stack located at least 100 feet from the surface hole location. The flare will be utilized to combust any natural gas that is brought to surface during normal drilling operations. In the case of emergency or malfunction, any flared volumes will be reported appropriately.
- C. During completion operations any natural gas produced by the well will be flared. Following completion and flowback operations, the production stream will flow to portable separation equipment until well facility is completed, at which point fluids will be directed to permanent separation equipment. The separated natural gas will be sent to a gas gathering line. If the natural gas does not meet gathering pipeline specifications, gas will be flared for 60 days or until the gas meets pipeline specifications. The flare stack will be properly sized and equipped with an automatic igniter or continuous pilot. Gas samples will be taken twice per week and natural gas will be routed into a gathering system as soon as the pipeline specifications are met.
- D. During production operations natural gas will not be flared unless an exception as listed in 19.15.27.8(D)(1-4) is met. If there is no adequate takeaway for the produced natural gas, the well will be shut-in until a gas gathering system or alternative beneficial use is available, with exception of emergency or malfunction situations.



- E. Armstrong Energy Corporation will comply with performance standards as listed in 19.15.27.8(E)(1-8). All equipment will be designed and sized to handle maximum pressure in order to minimize waste. Storage tanks that are routed to a flare or other control device will be equipped with automatic gauging systems to reduce venting of natural gas. Flare stacks will be equipped with an automatic ignitor or continuous pilot. AEC conducts AVO inspections as described in 19.15.27.8(E)(5)(a) at frequencies specified in 19.15.27.8(E)(5)(b) and (c). All emergencies or malfunctions will be resolved as quickly and safely as possible to minimize waste.
- F. The volume of natural gas that is vented, flared or beneficially used during drilling, completion, or production operations, will be measured or estimated and reported accordingly. AEC will install equipment to measure the volume of natural gas flared from a facility associated with a well authorized by an APD after May 25, 2021 that has an average daily production greater than 60,000 cubic feet of natural gas. If metering is not practicable due to circumstances such as low flow rate or low pressure venting or flaring, AEC will estimate the volume of flared or vented natural gas. Measuring equipment will conform to industry standards and will not be equipped with a bypass around the metering element except for the sole purpose of inspecting and servicing the metering equipment.

*VIII: Description of Armstrong Energy Corporation's best management practices to minimize venting during active and planned maintenance.*

For active and planned maintenance activities, venting will be limited to the depressurization of the subject equipment to ensure safe working conditions. For maintenance of production equipment, the producing well associated with the equipment will be shut-in to prevent venting.

State of New Mexico  
Energy, Minerals and Natural Resources Department  
Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Submit Electronically  
Via E-permitting

## NATURAL GAS MANAGEMENT PLAN

This Natural Gas Management Plan must be submitted with each Application for Permit to Drill (APD) for a new or recompleted well.

### **Section 1 – Plan Description**

**Effective May 25, 2021**

**I. Operator:** Armstrong Energy Corporation **OGRID:** 1092 **Date:** 08 / 26 / 2025

**II. Type:** ☒ Original ☐ Amendment due to ☐ 19.15.27.9.D(6)(a) NMAC ☐ 19.15.27.9.D(6)(b) NMAC ☐ Other.

If Other, please describe: \_\_\_\_\_

**III. Well(s):** Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
Iceman 20 State #1	30-025-XXXX	UL A Sec 20 T16S R36E	1109' FNL 996' FEL	100	50	0

**IV. Central Delivery Point Name:** Targa Monument/Eunice [See 19.15.27.9(D)(1) NMAC]

**V. Anticipated Schedule:** Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
Iceman 20 State #1	30-025-XXXX	11/1/25 est.	11/15/25 est.	11/25/25 est.	12/1/25 est.	12/5/25 est.

**VI. Separation Equipment:** ☒ Attach a complete description of how Operator will size separation equipment to optimize gas capture.

**VII. Operational Practices:** ☒ Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.

**VIII. Best Management Practices:** ☒ Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

**Section 2 – Enhanced Plan****EFFECTIVE APRIL 1, 2022**

Beginning April 1, 2022, an operator that is not in compliance with its statewide natural gas capture requirement for the applicable reporting area must complete this section.

☒ Operator certifies that it is not required to complete this section because Operator is in compliance with its statewide natural gas capture requirement for the applicable reporting area.

**IX. Anticipated Natural Gas Production:**

Well	API	Anticipated Average Natural Gas Rate MCF/D	Anticipated Volume of Natural Gas for the First Year MCF

**X. Natural Gas Gathering System (NGGS):**

Operator	System	ULSTR of Tie-in	Anticipated Gathering Start Date	Available Maximum Daily Capacity of System Segment Tie-in

**XI. Map.** ☐ Attach an accurate and legible map depicting the location of the well(s), the anticipated pipeline route(s) connecting the production operations to the existing or planned interconnect of the natural gas gathering system(s), and the maximum daily capacity of the segment or portion of the natural gas gathering system(s) to which the well(s) will be connected.

**XII. Line Capacity.** The natural gas gathering system ☐ will ☐ will not have capacity to gather 100% of the anticipated natural gas production volume from the well prior to the date of first production.

**XIII. Line Pressure.** Operator ☐ does ☐ does not anticipate that its existing well(s) connected to the same segment, or portion, of the natural gas gathering system(s) described above will continue to meet anticipated increases in line pressure caused by the new well(s).

☐ Attach Operator's plan to manage production in response to the increased line pressure.

**XIV. Confidentiality:** ☐ Operator asserts confidentiality pursuant to Section 71-2-8 NMSA 1978 for the information provided in Section 2 as provided in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and attaches a full description of the specific information for which confidentiality is asserted and the basis for such assertion.

### **Section 3 - Certifications**

**Effective May 25, 2021**

Operator certifies that, after reasonable inquiry and based on the available information at the time of submittal:

☒ Operator will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system; or

☐ Operator will not be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system.

***If Operator checks this box, Operator will select one of the following:***

**Well Shut-In.** ☐ Operator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection D of 19.15.27.9 NMAC; or

**Venting and Flaring Plan.** ☐ Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential alternative beneficial uses for the natural gas until a natural gas gathering system is available, including:

- (a) power generation on lease;
- (b) power generation for grid;
- (c) compression on lease;
- (d) liquids removal on lease;
- (e) reinjection for underground storage;
- (f) reinjection for temporary storage;
- (g) reinjection for enhanced oil recovery;
- (h) fuel cell production; and
- (i) other alternative beneficial uses approved by the division.

### **Section 4 - Notices**

1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

(a) Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or

(b) Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.

2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.



I certify that, after reasonable inquiry, the statements in and attached to this Natural Gas Management Plan are true and correct to the best of my knowledge and acknowledge that a false statement may be subject to civil and criminal penalties under the Oil and Gas Act.

Signature:	<i>Kyle Alpers</i>
Printed Name:	Kyle Alpers
Title:	Senior Vice President
E-mail Address:	kalpers@aecnm.com
Date:	08/26/25
Phone:	575-625-2222
<b>OIL CONSERVATION DIVISION</b> <b>(Only applicable when submitted as a standalone form)</b>	
Approved By:	
Title:	
Approval Date:	
Conditions of Approval:	