District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

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

Form C-101
Revised July 18, 2013

☐ AMENDED REPORT

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

1. Operator Name and Address	2. OGRID Number
Armstrong Energy Corporation, PO Box 1973, Roswell, NM 88202	1092
	3. API Number: 30-005-63887

4. Property Code	5. Property Name	6. Well No.
	Volleyball State	001

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
P	2	12S	26E		660	South	660	East	Chaves

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County

9. Pool Information

Pool Name	Pool Code
Sand Draw; Abo	97418

Additional Well Information

11. Work Type	12. Well Type	13. Cable/Rotary	14. Lease Type	15. Ground Level Elevation
P	G	R	State	3675
16. Multiple	**17. Proposed Depth**	**18. Formation**	**19. Contractor**	**20. Spud Date**
N	4915	Abo		
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	17.5	13.375	48	40	25	0
Surf	12.25	8.625	24	1075	390 + 200 sx	0
Prod	7.875	5.5	17	5,450	500 sx + 300 sx	330

Casing/Cement Program: Additional Comments

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
DoubleRam	5000		

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief.
I further certify that I have complied with 19.15.14.9 (A) NMAC ☐ and/or 19.15.14.9 (B) NMAC ☐, if applicable.
Signature: Jeffery Tew

Printed name: Jeffery Tew
Title: Operations Engineer
E-mail Address: jtew@aecnm.com
Date: 7/13/2022 Phone: 575-625-2222

OIL CONSERVATION DIVISION

Approved By:
Title:
Approved Date: Expiration Date:
Conditions of Approval Attached

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1301 W. Grand Avenue, Artesia, NM 88210
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State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised October 12, 2005
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number	2 Pool Code	3 Pool Name
30-005-63887	97418	Sand Draw, Abo

4 Property Code	5 Property Name	6 Well Number
	Volleyball State	1

7 OGRID No.	8 Operator Name	9 Elevation
1092	Armstrong Energy Corporation	3675

10 Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	2	12S	26E		660	South	660	East	Chaves

11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

12 Dedicated Acres	13 Joint or Infill	14 Consolidation Code	15 Order No.
160			

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.

16

Lease No.: VO-07831

660'
660'

17 OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and 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 such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature — Date: 7/20/2007

Bruce A. Stubbs
Printed Name

18 SURVEYOR CERTIFICATION

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.

11/28/06
Date of Survey

Signature and Seal of Professional Surveyor: JOHN D. JAQUESS, New Mexico, 6290, Registered Professional Engineer

6290
Certificate Number

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.

XI: Map

Map shown below displays the location of the well (labeled in Section 2) and the existing gas pipeline (pink line). The metered gas connection is on the well pad. Since this is not a new well the gas connection and the associated pipeline have been in place since 2007. The existing pipeline and connection has more than adequate capacity for the planned gas production, as this well has produced from the proposed interval in the past into the existing pipeline. We have produced as much as 700mcfd into this pipeline without issue, and we anticipate a gas rate not to exceed 100mcfd from our proposed recompletion. The existing buried pipeline travels East approximately 600 feet from the well pad before turning north and leading to IACX's gathering system approximately 15 miles away in the Red Bluff area.

XI: Operator's plan to manage production in response to the increased line pressure.

This well has produced into this line previously at a rate of up to 700mcfd, and has not had any trouble nor reduced production or increased waste as a result of any increase in line pressure. The location is fairly remote and the system has historical production tied into it that has declined considerably from what the gathering system was originally designed for in terms of volume and pressure. We do not anticipate our recompletion to increase line pressure dramatically.

State of New Mexico
Energy, Minerals and Natural Resources Department

Submit Electronically
Via E-permitting

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

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:** 07 / 26 / 22

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
Volleyball State #1	30-005-63887	P Sec 12-12S-26E	600' FEL			
			600' FSL			

IV. Central Delivery Point Name: IACX Gathering Point Section 10 Chaves County, NM [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
Volleyball State #1	30-005-63887	N/A	N/A	9/1/2022	9/1/2022	9/1/2022

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:	Kyle Alpers
Printed Name:	Kyle Alpers
Title:	VP of Engineering
E-mail Address:	kalpers@aecnm.com
Date:	7/26/2022
Phone:	575-625-2222

OIL CONSERVATION DIVISION **(Only applicable when submitted as a standalone form)**
Approved By:
Title:
Approval Date:
Conditions of Approval:

Armstrong Energy Corporation
Volleyball State #1
660' FSL & 660' FEL
Sec. 2-T12S-R26E
Chaves County, New Mexico

Hydrogen Sulfide Plan

Offset wells have not reported hydrogen sulfide in concentration in excess of 100 ppm. As per Rule 118.C.2, no further action is necessary.

As a precautionary measure, a H_2S monitor will be maintained on the rig floor to alert personnel to unanticipated H_2S buildup at the bell nipple and rig floor. Should H_2S be detected, a Hydrogen Sulfide Plan will be implemented.

Should you have any questions concerning this well, please call me at 505-625-2222.

Sincerely,
Armstrong Energy Corporation

By: Bruce A. Stubbs
Vice President - Operations

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State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-144
June 1, 2004

For drilling and production facilities, submit to appropriate NMOCD District Office.
For downstream facilities, submit to Santa Fe office

Pit or Below-Grade Tank Registration or Closure

Is pit or below-grade tank covered by a "general plan"? Yes ☐ No **X**
Type of action: Registration of a pit or below-grade tank **X** Closure of a pit or below-grade tank ☐

Operator: Armstrong Energy Corporation Telephone: 505-625-2222 e-mail address: bastubbs@zianet.com
Address: P.O. Box 1793, Roswell, NM 88202-1793
Facility or well name: Volleyball State #1 API #: 30-005-XXXXXX U/L or Qtr/Qtr P Sec 2 T 12S R 26E
County: Chaves Latitude _____ Longitude _____ NAD: 1927 ☐ 1983 ☐
Surface Owner: Federal ☐ State ☐ Private **X** Indian ☐

Pit	**Below-grade tank**	
Type: Drilling **X** Production ☐ Disposal ☐ Workover ☐ Emergency ☐ Lined **X** Unlined ☐ Liner type: Synthetic **X** Thickness 20 mil Clay ☐ Pit Volume 5,000 bbl	Volume: _____bbl Type of fluid: _____ Construction material: _____ Double-walled, with leak detection? Yes ☐ If not, explain why not.	
Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.) Sec. 12-T12S-R26E, 130'	Less than 50 feet 50 feet or more, but less than 100 feet 100 feet or more	(20 points) (10 points) (0 points) XXX
Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)	Yes No	(20 points) (0 points) XXX
Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)	Less than 200 feet 200 feet or more, but less than 1000 feet 1000 feet or more	(20 points) (10 points) (0 points) XXX
	Ranking Score (Total Points)	0 Points

If this is a pit closure: (1) Attach a diagram of the facility showing the pit's relationship to other equipment and tanks. (2) Indicate disposal location: (check the onsite box if your are burying in place) onsite ☐ offsite ☐ If offsite, name of facility_____. (3) Attach a general description of remedial action taken including remediation start date and end date. (4) Groundwater encountered: No ☐ Yes ☐ If yes, show depth below ground surface_____ft. and attach sample results. (5) Attach soil sample results and a diagram of sample locations and excavations.

Additional Comments: The reserve pit will be constructed with a depth of approximately 10 feet and lined with a 20 mil liner. Closure will occur with in 6 months of the conclusion of drilling/completion operations. Fluids will be allowed to evaporate or will be removed prior to closing. A 20 mil liner will be placed over the pit contents with a minimum of 3 feet of overlap of the underlying pit area. The pit area will be back filled back to grade with a minimum of 3 feet of clean soil and like material. A 48 hour notice prior to closure will be given to the Artesia Oil Conservation Division Office and New Mexico One Call.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. **I further certify that the above-described pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☐, a general permit ☐, or an (attached) alternative OCD-approved plan ☐.**

Date: 1-4-07
Printed Name/Title Bruce A. Stubbs Engineer Signature B A Stubbs

Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or regulations.

Approval:
Printed Name/Title _____ Signature _____ Date: _____

FORMATION TOPS	FORMATION	DEPTH	SUBSEA
	K.B.	0	3700
	Queen	370	3330
	Penrose	570	3130
	Grayburg	770	2930
	San Andres	1010	2690
	Glorieta	2200	1500
	Yeso	2310	1390
	Tubb	3660	40
	Abo	4410	-710
	Wolfcamp	5060	-1360
	Wolfcamp "B" Zone	5150	-1450
	Wolfcamp - Cisco	5240	-1540
	Strawn	6110	-2410
	Siluro-Devonian	6240	-2540

B.O.P. PROGRAM:

2000 PSI W.P. Nippled up on 8 5/*" casing
1000 PSI TEST PRESSURE
Maximum allowable shut-in pressure 300 psi. (8 5/8" shoe rating)

BHP 2500 psi

AT 6200 FT.

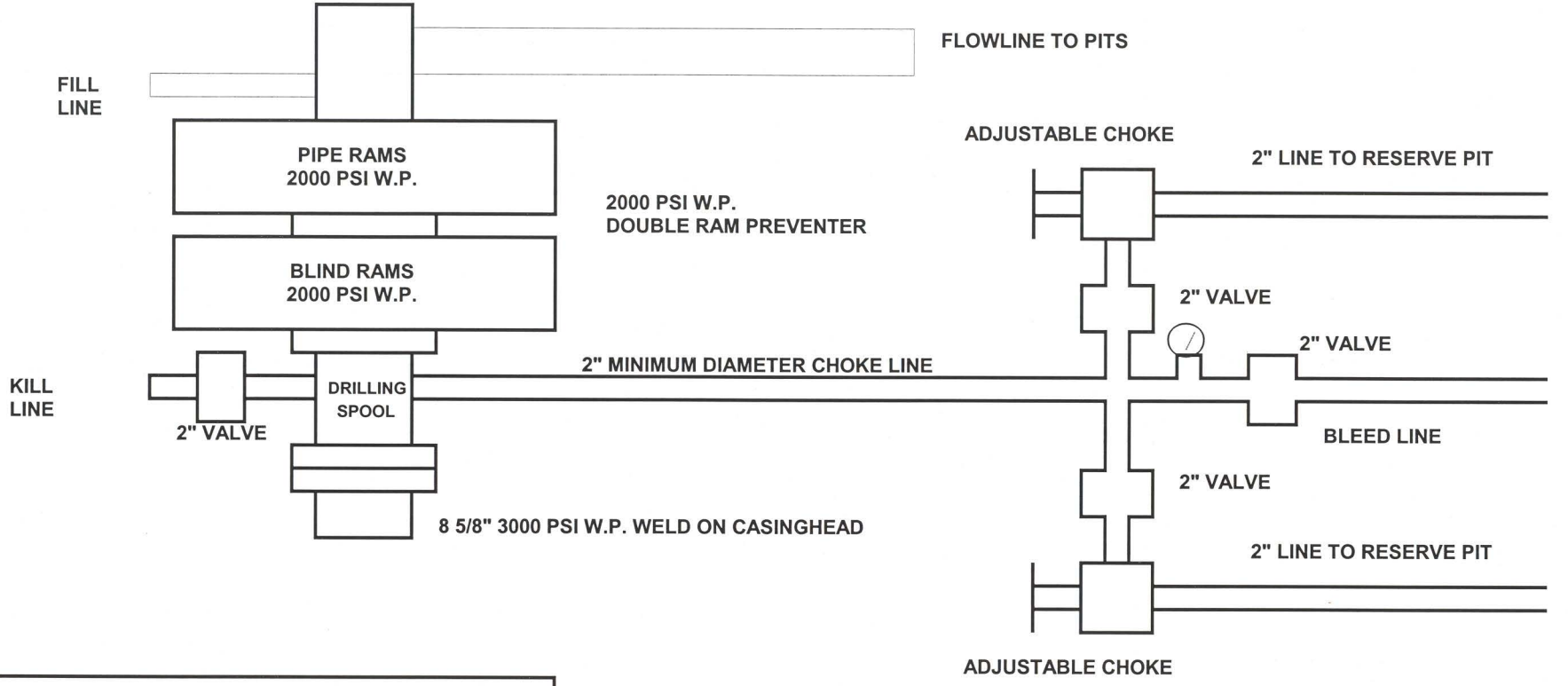
HYDOGEN SULPHIDE

OFFSET WELLS HAVE NOT REPORTED HYDROGEN SULPHIDE IN CONCENTRATIONS IN EXCESS OF 100 PPM. AS PER RULE 118.C.2, NO FURTHER ACTION IS NECESSARY.

AS A PRECAUTIONARY MEASURE, A H2S MONITOR WILL BE INSTALLED ON THE RIG FLOOR TO ALERT PERSONNEL TO UNANTICIPATED H2S BUILD UP AT THE BELL NIPPLE AND RIG FLOOR.
SHOULD H2S BE DETECTED A H2S PLAN WILL BE IMPLEMENTED

BY: Bruce A. Stubbs
Engineer

TYPICAL 2000 PSI BOP STACK



ARMSTRONG ENERGY CORPORATION

VOLLEYBALL STATE #1
660' FSL & 660' FEL
SECTION 2-T12S-R26E
EDDY COUNTY, NEW MEXICO

API No.: 30-005-

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

CONDITIONS

Action 124926

CONDITIONS

Operator: ARMSTRONG ENERGY CORP P.O. Box 1973 Roswell, NM 88202	OGRID: 1092
	Action Number: 124926
	Action Type: [C-101] Drilling Non-Federal/Indian (APD)

CONDITIONS

Created By	Condition	Condition Date
kpickford	Notify NMOCD 24 Hours Prior to beginning operations	8/4/2022