



BRIAN SANDOVAL
Governor

STATE OF NEVADA
COMMISSION ON MINERAL RESOURCES
DIVISION OF MINERALS
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RICHARD PERRY
Administrator

The Commission on Mineral Resources will meet in special session on Thursday January 16, 2014 at Legislative Counsel Bureau, 401 South Carson Street Room #2135, Carson City, NV 89701, at 1:00 pm P.S.T.

Attached with this notice is the agenda for said meeting of the Commission. This notice is posted pursuant to the NRS as amended by the 1995 Legislature. This notice is to be posted at the following public places:

**LEGISLATIVE COUNSEL BUILDING
STATE LIBRARY AND ARCHIVES
DIVISION OF MINERALS- CARSON CITY AND LAS VEGAS OFFICES
STATE CAPITAL**

The public may contact Valerie Kneefel at (775) 684-7043 or Email Vkneefel@govmail.state.nv.us to request supporting material for the meeting described herein. The agenda and supporting material is available at www.minerals.state.nv.us

Dated this 10th day of January, 2014

NOTICE TO PERSONS WITH DISABILITIES

Members of the public who are disabled and require special accommodations or assistance at the meeting are requested to notify the Division of Minerals, 400 W. King Street, suite 106, Carson City, NV 89701 or by calling (775) 684-7043.

A handwritten signature in cursive script, appearing to read "R. Perry", written over a horizontal line.

Richard Perry, Administrator
Division of Minerals



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COMMISSION ON MINERAL RESOURCES
"Special Meeting"
Legislative Counsel Bureau
401 South Carson Street Room #2135
Carson City, NV 89701

Thursday, January 16, 2014

1:00 P.M.

AGENDA

The Agenda for this meeting of the Commission on Mineral Resources has been properly posted for this date and time in accordance with NRS requirement.

CALL TO ORDER

ROLL CALL

PLEDGE OF ALLEGIANCE

COMMENTS BY THE GENERAL PUBLIC

Pursuant to N.R.S. 241, this time is devoted to comments by the public, if any, and discussion of those comments. No action may be taken upon a matter raised under this item on the agenda until the matter itself has been specifically included on a successive agenda and identified as an item for possible action. All public comments will be limited to 5 minutes for each person. **ACTION WILL NOT BE TAKEN**

I. NEW BUSINESS

- A. Consideration of draft changes to NAC 522 (Oil & Gas) to address the use of hydraulic fracturing in the drilling of exploration or production wells for oil and/or gas in Nevada. **FOR POSSIBLE ACTION**

Background: The Nevada Legislature approved Senate Bill 390 (NRS 522.119), during the 2013 session, which reads as follows:

- 1. The Division of Minerals and the Division of Environmental Protection shall, jointly, develop a hydraulic fracturing program to:
 - (a) Assess the effects of hydraulic fracturing on the waters of the State of Nevada;
 - (b) Require a person who engages in hydraulic fracturing to disclose each chemical used to engage in hydraulic fracturing; and
 - (c) Provide for notice to members of the general public concerning activities relating to hydraulic fracturing in this state.

2. The Commission on Mineral Resources shall adopt regulations to implement the hydraulic fracturing program required by subsection 1.

NDOM and NDEP are working with industry and environmental community stakeholders to develop a program for hydraulic fracturing that addresses direction from the legislature.

NDOM staff will present the program and recommend changes to NAC 522 which would establish new regulations for drilling of oil and gas wells where hydraulic fracturing will be used, and recommend other changes to update NAC 522.

The Commission can approve, request modifications or reject the program presented.

If the proposed program is approved, the language for changes in NAC 522 would be submitted to the Legislative Council Bureau for legal review. Once LCB has completed the legal review, staff would schedule public workshops at several venues in the State and gather public and industry recommendation and comments. These would be presented with a final draft of the recommended program to the Commission at a later date in 2014.

PUBLIC COMMENT

Pursuant to N.R.S. 241, this time is devoted to comments by the public, if any, and discussion of those comments. No action may be taken upon a matter raised under this item on the agenda until the matter itself has been specifically included on a successive agenda and identified as an item for possible action. All public comments will be limited to 5 minutes for each person. **ACTION WILL NOT BE TAKEN**

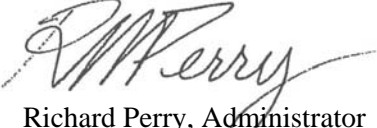
NOTE:

The Chairperson, Commission on Mineral Resources, or other Presiding Officer of the Commission reserves the right to change the order of the agenda, and if the agenda has not been completed, to recess the meeting and continue on another specified date and time. Additionally, the Commission reserves the right to combine two or more agenda items, and/or remove an item from the agenda, or delay discussion relating to an item on the agenda at any time.

ADJOURNMENT

FOR POSSIBLE ACTION

Respectfully Submitted,



Richard Perry, Administrator
Division of Minerals

**PROPOSED REGULATION OF THE
COMMISSION ON MINERAL RESOURCES
AND THE NEVADA DIVISION OF MINERALS**

LCB File No. Rxxx-14

January 16, 2014

EXPLANATION – Matter in *italics* is new; matter in brackets [~~omitted material~~] is material to be omitted.

AUTHORITY: §§1-19, NRS 522.119; §§5...xxx, NRS 522.040(3), NRS 522.090 and NRS 522.xxx. Section 20, NRS53A.090.

A REGULATION relating to oil and gas wells; establishing a system to manage hydraulic fracturing; establishing certain requirements and procedures for water quality sampling; establishing procedures for obtaining a waiver from the division from the requirement that...; making various other changes concerning...; and providing other matters properly relating thereto.

Section 1. Chapter 522 of NAC is hereby amended by adding thereto the provisions set forth as sections 2 to 17, inclusive, of this regulation.

Sec. 2. *“AVAILABLE WATER SOURCE” means a water source for which the water well owner, owner of a spring, or a land owner, as applicable, has given consent for sampling and testing and has consented to having the sample data obtained made available to the public, including without limitation, being posted on the division’s web page on the Internet or its successor.*

Sec. 3. *“WATER SOURCE” means water wells or springs that are regulated by the Nevada Division of Water Resources of the State Department of Conservation and Natural Resources.*

Sec. 4. *“Hydraulic fracturing” means the process of pumping a fluid into or under the surface of the ground to create fractures in the rock to facilitate the production or recovery of oil or gas...has the meaning ascribed to it in NRS 522.119(3) (b).*

Sec. 5. *“Division of Environmental Protection” means the Division of Environmental Protection of the State Department of Conservation and Natural Resources.*

Sec. 6. *“Area of Review” means the land area within a minimum of a 1 mile radius from the proposed well-bore or surface projection of the zone proposed for hydraulic fracturing.*

Sec. 7. *“Start date” means the date when an oil or gas well or a well drilled for exploratory purposes is first spudded or drilled.*

Sec. 8. *“Completion date” means the date when an operator has been permitted to move the drilling rig off of the well location.*

Sec. 9. ***GROUNDWATER BASELINE SAMPLING AND MONITORING***
a. Applicability and effective date.

This section applies to all oil or gas wells or wells drilled for exploratory purposes where the operator intends to use the process of hydraulic fracturing, for which an Application for Permit to Drill (Form 2) or a sundry notice (Form 4) for re-entry is submitted on or after the effective date of this section.

b. Sampling locations.

Initial baseline samples and subsequent monitoring samples shall be collected from all Available Water Sources, up to a maximum of four (4), within a one (1) mile radius of a proposed oil or gas well or well drilled for exploratory purposes. If more than four (4) available Water Sources are present within a one (1) mile radius of a proposed oil or gas well or well drilled for exploratory purposes, the operator shall select the four sampling locations based on the following criteria:

(1) Proximity. Available Water Sources closest to the proposed oil or gas well or well drilled for exploratory purposes are preferred.

(2) Orientation of sampling locations. To extent groundwater flow direction is known or can reasonably be inferred, sample locations from both down-gradient and up-gradient are preferred over cross-gradient locations. Where groundwater flow direction is uncertain, sample locations should be chosen in a radial pattern from a proposed oil or gas well or well drilled for exploratory purposes.

(3) Where multiple defined Water Sources are present, sampling the deepest is preferred.

(4) Condition of Water Source. An operator is not required to sample Water Sources that are determined by the Administrator to be improperly maintained, nonoperational, or have other physical impediments to sampling that would not allow for a representative sample to be safely collected or would require specialized sampling equipment (e.g. non-functioning wells, geothermal wells or intermittent springs).

c. Inability to locate an Available Water Source.

Before any well is spudded or drilled for oil or gas, an operator may request an exception from the requirements of this Section by filing a Sundry Notice (Form 4) for the Administrator's review and approval if:

(1) No Available Water Sources are located within one (1) mile of a proposed oil or gas well or a well drilled for exploratory purposes;

(2) The only Available Water Sources are determined to be unsuitable pursuant to subpart b.5, above. An operator seeking an exception on this ground shall document the condition of the Available Water Sources it has deemed unsuitable; or

(3) The owners of all Available Water Sources suitable for testing under this Section refuse to grant access despite an operator's reasonable good faith efforts to obtain consent to conduct sampling. An operator seeking an exception on this ground shall document the efforts used to obtain access from the owners of suitable Water Sources.

d. Timing of sampling.

(1) Initial sampling shall be conducted within 12 months before any well is hydraulically fractured, and

(2) Subsequent monitoring: One subsequent sampling event shall be conducted at the initial sample locations between six (6) and twelve (12) months, and a second

subsequent sampling event shall be conducted between sixty (60) and seventy-two (72) months following the hydraulic fracturing of an oil or gas well or a well drilled for exploratory purposes. If a well is drilled and produces hydrocarbons for a period of less than 60 months and is abandoned, the second subsequent sampling shall be conducted at the time the well is plugged. Wells that are drilled and abandoned without ever producing hydrocarbons are exempt from the second subsequent monitoring sampling under this subpart d.

(3) Previously sampled Available Water Sources. In lieu of conducting the initial sampling required pursuant to subsection d. (1) or the second subsequent sampling event required pursuant to subsection d. (2), an Operator may rely on water sampling analytical results obtained from an Available Water Source within the sampling area provided:

A. The previous water sample was obtained within the 12 months preceding the initial sampling event required pursuant to subsection d.(1) or the second subsequent sampling event required pursuant to subsection d.(2); and

B. the sampling procedures, including the constituents sampled for, and the analytical procedures used for the previous water sample were substantially similar to those required pursuant to subparts e.(1) and (2), below. An operator may not rely solely on previous water sampling analytical results obtained pursuant to the subsequent sampling requirements of subsection d.(2), above, to satisfy the initial sampling requirement of subsection d.(1); and

C. the Administrator timely received the analytical data from the previous sampling event.

(4) The Administrator may require additional sampling if changes in water quality are identified during subsequent monitoring.

e. Sampling procedures and analysis.

(1) Sampling and analysis shall be conducted in conformance with an accepted industry standard as described in NAC Chapter 445A. Sampling and analysis conducted in conformance with NAC Chapter 445A shall be deemed to satisfy the requirements of this subsection. Upon request, an operator shall provide its sampling protocol to the Administrator.

(2) The initial baseline and subsequent sampling described in this section shall include total dissolved solids (TDS), dissolved gases (methane, ethane, propane), alkalinity (total bicarbonate and carbonate as CaCO₃), major anions (bromide, chloride, fluoride, sulfate), major cations (calcium, magnesium, potassium, sodium), total petroleum hydrocarbons (TPH) and BTEX compounds (benzene, toluene, ethylbenzene and xylenes). The location of the sampled Water Sources shall be described by public land survey as defined in NAC 534.185 and county assessor's parcel number and must include global positioning coordinates as set forth in NAC 534.340(2)(b)(2).

(3) If free gas or a dissolved methane concentration greater than 1.0 milligram per liter (mg/l) is detected in a water sample, gas compositional analysis and stable isotope analysis of the methane (carbon and hydrogen – 12C, 13C, 1H and 2H) shall be

performed to determine gas type. The operator shall notify the Administrator and the owner of the water well immediately if:

- A. the test results indicated thermogenic or a mixture of thermogenic and biogenic gas;*
 - B. the methane concentration increases by more than 5.0 mg/l between sampling periods; or*
 - C. the methane concentration is detected at or above 10 mg/l.*
- (4) The operator shall notify the Administrator immediately if BTEX compounds or TPH are detected in a water sample.*

f. Sampling Results.

Copies of all final laboratory analytical results shall be provided to the Administrator and the Water Source owner as soon as the laboratory results are available and before any hydraulic fracturing process is initiated. The analytical results, the surveyed sample Water Source locations, and the field observations shall be submitted to the Administrator in an electronic data deliverable format, and will be made available for public inspection by the division.

Sec. 10. ADDITIONAL REQUIREMENTS FOR A WELL THAT IS INTENDED FOR HYDRAULIC FRACTURING – APPLICATION TO DRILL

- a. In addition to the requirements in this section for the application to drill an oil or gas well, the operator must submit the following pertinent data, using publically available information from within the Area of Review. The division may require a*

larger AOR, or the collection of additional data, based on population density, residential locations, surface water locations, and other concerns.

- 1) A report that includes information regarding the Water Source permit number and owner of record currently on file with the Nevada Division of Water Resources of the State Department of Conservation and Natural Resources,*
- 2) The well depth and diameter of water well casing, the static water level below land surface or flow rate if any, the amount of the water right appropriation, and the location of each Water Source within the Area of Review described by public land survey as defined in NAC 534.185, the county assessor's parcel number and global positioning coordinates as set forth in NAC 534.340(2)(b)(2).*
- 3) Maps and cross-sections, utilizing publically available information, denoting surface and subsurface geology including location of known or suspected faults.*
- 4) A map showing the location of all known Water Sources within the Area of Review, the overall project area or lease holdings, the Area of Review boundaries, land ownership and applicable Assessor Parcel Numbers, and*
- 5) The source and estimated volume of water required for each well hydraulic fracturing process shall be identified and provided to the Division.*

**Sec. 11. *ADDITIONAL REQUIREMENTS FOR ALL OIL OR GAS WELLS
AND WELLS DRILLED FOR EXPLORATORY PURPOSES***

- a. A complete copy of the approved drilling permit must be at the well location during the drilling of the well, and during the completion or plugging of the well.*
- b. The operator shall inform the division by telephone or email at least 24 hours before any well is spudded for oil or gas or for exploratory purposes.*
- c. The operator shall inform the division by telephone or email at least 24 hours before installing or cementing casing, or before any blow out prevention equipment (BOPE) tests or formation tests.*
- d. The casing used in any oil or gas well or wells drilled for exploratory purposes must meet the minimum specifications of the American Petroleum Institute Specification (API) Spec 5CT “Specification for Casing and Tubing, Ninth Edition” or its successor, or as may be approved by the Administrator of the Division.*
- e. The operator shall use the American Petroleum Institute (API) Specification 10A “Specification for Cements and Materials for Well Cementing, Twenty Fourth Edition”, or its successor, (Type A or similar Portland cement) for the cementing of all casing strings, or as may be approved by the Administrator of the Division.*
- f. The operator shall store and contain all materials on the well location in a safe and orderly manner. Unintended releases or spills must be managed in accordance with the requirements of the Nevada Division of Environmental Protection.*

g. The operator shall contain all liquids that are returned to the surface and discharged from the wellbore in accordance with the requirements of the Nevada Division of Environmental Protection. A reserve pit for drilling fluids must not later be used for the discharge of well bore fluids during the testing of the well without prior approval.

Sec. 12. *ADDITIONAL REQUIREMENTS FOR CONSTRUCTING A WELL THAT IS INTENDED FOR HYDRAULIC FRACTURING – INTERMEDIATE CASING*

a. In addition to the requirements in NAC 522.265, the first intermediate casing shall be installed from the desired depth to the ground surface.

Sec. 13. *ADDITIONAL REQUIREMENTS FOR CONSTRUCTING A WELL THAT IS INTENDED FOR HYDRAULIC FRACTURING –PRODUCTION CASING*

a. The annular space outside the production casing string shall be cemented to a minimum of 500 feet above the uppermost zone of potential hydrocarbon interest.

Sec. 14. *ADDITIONAL REQUIREMENTS BEFORE INITIATING ANY HYDRAULIC FRACTURING PROCESS*

- a. *The operator shall notify the private land owner(s), or lessors, of the land where the well is located, of a future hydraulic fracturing process at least 14 days in advance of any such operation.*
- b. *The operator shall certify the cement bond log results on the intermediate casing, production casing, and production liner (if any). The certification must be by affidavit, signed by a competent person designated by the operator, and must state that the cement bond log confirms that the different strata are sealed and isolated with casing and cement, as intended in NAC 522.260.*
- c. *The operator must insure that the any chemicals proposed to be used in a hydraulic fracturing process are only those chemicals listed on the division's web page. A sundry notice (Form 4) must be submitted to the division for approval at least 30 days before hydraulic fracturing if there are any chemicals proposed to be used that are not listed.*
- d. *The operator must file a sundry notice (Form 4) and report for division approval that describes all specific aspects of the proposed hydraulic fracturing process at least 14 days before any such operation. The report shall include the following: (1) the number of stages to be utilized, (2) the measured depth/ true vertical depth below land surface to each stage, (3) the length of each stage, (4) all intervals to be perforated in measured depth/true vertical depth below land surface, (5) the number and diameter of perforations per foot and (6) the estimated hydraulic pressures to be utilized.*

- e. The operator shall monitor and record all pressures, including annular pressures, during the hydraulic fracturing process. The maximum hydraulic pressure must not exceed the burst rating of any casing exposed to that pressure. A lower maximum hydraulic pressure may be required if deemed necessary by the division.*
- f. The operator shall immediately stop the hydraulic fracturing process and notify the division if any change in annular pressure exceeds 10 percent. The operator must provide the division with all recorded hydraulic fracturing pressures immediately following each stage of the hydraulic fracturing process.*
- g. The operator shall contain all liquids that are returned to the surface and discharged from the wellbore at the conclusion of each stage of the hydraulic fracturing process in enclosed steel tanks, or in accordance with the requirements of the Nevada Division of Environmental Protection. The method and location for final disposal of the returned liquids must be approved by the division before removal from the well location.*
- h. The operator shall report the amount and type of chemicals that were used in the hydraulic fracturing process to www.fracfocus.org or its successor within 60 days of the hydraulic fracturing process for public disclosure.*

Sec. 15. NAC 522.260 is hereby amended to read as follows:

NAC 522.260 Strata sealed off from other strata.

1. During the drilling of any oil or gas well *or a well drilled for exploratory purposes*, all strata bearing oil, gas or water above the producing horizon must be sealed or separated in order to prevent their contents from passing into other strata.

2. All fresh waters and waters of value or possible value for domestic, commercial or stock purposes must be confined to their respective strata and be adequately protected by methods approved by the division. Precautions must be taken in drilling and abandoning wells to guard against any loss of any fresh water from the strata in which it occurs, and the contamination of any fresh water by objectionable water or any oil or gas.

3. The operator of any well must shut off and exclude all water from any oil-or gas-bearing stratum to the satisfaction of the division.

[Div. of Mineral Res., § 212 eff. 12-20-79]—(NAC A by Dep't of Minerals, 7-22-87)

Sec. 16. NAC 522.265 is hereby amended to read as follows:

NAC 522.265 Wells drilled with rotary tools. Unless a special provision requires otherwise, the following applies to all wells drilled with rotary tools:

1. Conductor casing shall be installed and the annulus outside the casing shall be cemented to surface with cement, cement grout or concrete grout.

~~2. [1.] [Suitable and safe surface casing must be used in all wells for proper anchorage. In all wells being drilled, surface and other protection casing must be run to sufficient depth to afford safe control of any pressures which might be encountered and must be sufficiently tested therefor.]~~ Surface casing *shall be installed to a minimum depth of 500 feet below surface* ~~[must be set into an impervious formation]~~ and *the annulus outside the casing shall* be cemented with sufficient cement to circulate to the top of the hole. *The Administrator may require additional cementing of the surface casing if deemed necessary to comply with the intent of NAC 522.260.* If cement does not circulate, *the distance to the top of the cement must be measured in the annular*

space and reported to the division. Any remedial cementing operation or “top job” of the open annular space must be completed before drilling ahead or initiating tests.

- a. A report illustrating the pressure/rate/density curves related to the cementing of the surface casing must be submitted to the division at the completion of the cementing procedure.*
- b. A cement bond log (CBL) covering the surface casing from its casing shoe to the surface may be required by the Administrator in the event of a significant loss of cement during the cementing of the surface casing. [~~the annulus outside the casing must be cemented before drilling plug or initiating tests.~~]*
- c. A surface casing pressure test shall be conducted before drilling out the surface casing shoe. The casing must be pressured to a minimum of 1,500 psig for a minimum of 30 minutes. If, at the end of 30 minutes, the pressure shows a drop of 10% or more from the original test pressure, the casing shall be condemned until the leak is corrected. A pressure test demonstrating less than a 10% pressure drop after 30 minutes constitutes confirmation that the condition has been corrected. The operator shall notify the division of a failed test. In the event of a pressure test failure, drilling operations may not re-commence until the Administrator approves a remediation plan, the operator successfully implements the plan, and the operator conducts a successful pressure test.*
- d. A Formation Integrity Test (FIT) must be conducted when the surface casing shoe is drilled out. The results of the FIT must be submitted to the division at the conclusion of the test.*

3. ~~[2.] [On all strings of casing below surface pipe, sufficient cement must be used to fill the annular volume behind the casing for]~~ *In the event an intermediate or production casing or an intermediate or production liner is installed or is necessary due to hole conditions, the annular space behind the casing or liner must be cemented for a minimum distance of 500 feet above the bottom of the casing, or 500 feet above any identified hydrocarbon bearing zone of interest, whichever is shallower. The division may require additional cementing of the casing if deemed necessary.* A cement plug or shoe must not be drilled until a minimum compressive strength of 300 pounds per square inch at bottom hole conditions has been attained according to the manufacturer's tables of cement strength for the particular cement mix being used.

- a. If an intermediate liner is utilized, a minimum of 100 feet of overlap between the surface casing shoe and the top of the liner is required. The operator shall utilize enough excess cement when cementing the intermediate liner to insure that the top of the cement is at least 25 feet above the top of the liner.*
- b. If cement calculations were not included in a previously approved cementing program these calculations must be submitted to the division for approval before the cementing procedure.*
- c. A report illustrating pressure/rate/density curves related to the cementing of the intermediate casing must be submitted to the division at the completion of the cementing procedure.*
- d. An intermediate casing or liner pressure test shall be conducted before drilling out of the bottom of the intermediate casing or liner. The intermediate casing or*

- liner must be pressured to a minimum of 1,500 psig for a minimum of 30 minutes.*
- e. The operator shall test the casing at a pump pressure in pounds per square inch (psi) calculated by multiplying the length of the true vertical depth in feet of the casing string by a factor of 0.5 psi per foot. The maximum test pressure required, however, unless otherwise ordered by the Administrator, need not exceed 1,500 psi. If, at the end of 30 minutes, the pressure shows a drop of 10% or more from the original test pressure, the casing shall be condemned until the leak is corrected. A pressure test demonstrating less than a 10% pressure drop after 30 minutes constitutes confirmation that the condition has been corrected. The operator shall notify the division of a failed test. In the event of a pressure test failure, completion operations may not re-commence until the Administrator approves a remediation plan, the operator successfully implements the plan, and the operator conducts a successful pressure test. The casing pressure test curve must be submitted to the division at the conclusion of the test.*
- f. A cement bond log (CBL) covering the intermediate casing from the bottom of the casing shoe to above the calculated top of cement prior to drilling out of the casing shoe. In the event a CBL does not show the needed clarity of cement occupying the annular space, the Administrator may require an ultrasonic cement bond log to be conducted. The CBL log and ultrasonic cement bond log if required, may be conducted at any time prior to the production casing being*

- installed. Digital copies of the cement bond log(s) and integrated interpretive log(s), must be provided to the division as soon as a digital versions are available.*
- g. A Formation Integrity Test (FIT) must be conducted when the intermediate casing shoe is drilled out. The results of the FIT must be submitted to the division at the conclusion of the test.*
 - h. In the event a production liner is hung from either the intermediate or production casing, a minimum of 100 feet of overlap between the intermediate or production casing shoe and the top of the liner is required. The operator shall utilize enough excess cement when cementing the production liner to insure that the top of the cement is at least 25 feet above the top of the liner.*
 - i. If cement calculations were not included in a previously approved cementing program these calculations are to be submitted to the division before the cementing procedure. The cementing procedure may not be initiated without the approval of the Administrator.*
 - j. A report illustrating pressure/rate/density curves related to the cementing of the production casing or liner are to be submitted to the Division at the completion of the cementing procedure.*
 - k. A production casing or liner pressure test must be conducted before drilling out of the bottom of the casing or liner. The production casing or liner must be pressured to a minimum of 3,000 psig for a minimum of 30 minutes. The procedure shall be as described in sub paragraph e of this section. The casing*

pressure test curve must be submitted to the division at the conclusion of the test.

- l. The operator shall test the casing in the manner set forth in subparagraph e. If, at the end of 30 minutes, the pressure shows a drop of 10% or more from the original test pressure, the casing shall be condemned until the leak is corrected. A pressure test demonstrating less than a 10% pressure drop after 30 minutes constitutes confirmation that the condition has been corrected. The operator shall notify the division of a failed test. In the event of a pressure test failure, completion operations may not re-commence until the Administrator approves a remediation plan, the operator successfully implements the plan, and the operator conducts a successful pressure test.*
- m. A cement bond log (CBL) covering the production casing from the bottom of the casing shoe to above the calculated top of cement prior to drilling out of the casing shoe. In the event a CBL does not show the needed clarity of cement occupying the annular space, the Administrator may also require an ultrasonic cement bond log to be conducted. The CBL log and ultrasonic cement bond log if required, may be conducted at any time prior to the well completion. Digital copies of the cement bond log(s) and integrated interpretive log(s), must be provided to the division as soon as a digital versions are available.*
- n. A Formation Integrity Test (FIT) must be conducted if the production casing shoe is drilled out. The results of the FIT must be submitted to the Division at the conclusion of the test.*

4. [3.] After cementing the surface casing, each well being drilled must be equipped with adequate blowout preventers. The use of blowout *prevention* equipment must be in accordance with good established oil field practice. The control equipment must include casing outlet valves with adequate provisions for [~~mudkill~~] *mud kill* and bleed-off lines of [~~proper~~] *appropriate* size and working pressure. All equipment must be in good operating condition at all times.

(The following is modified after NAC 534A.270 Prevention of blowout; testing of casing and equipment for prevention of blowout.)

a. All necessary precautions must be taken to keep wells under control and operating safely at all times. Well control and well head assemblies used in any oil or gas well or wells drilled for exploratory purposes must meet the minimum specifications of the American Petroleum Institute Specification (API) Recommended Practice 53 or its successor, or as may be approved by the Division.

b. Equipment for the prevention of a blowout, capable of shutting in the well during any operation, must be installed on the surface casing and maintained ready for use at all times. This equipment must be made of steel and have a rating for pressure of at least 3000 psig or equal to the maximum anticipated pressure at the wellhead.

- c. Immediately after installation, the casing and equipment for the prevention of a blowout must be tested under pressure. These tests must be witnessed or otherwise assured by the Division or an authorized representative before the shoe is drilled out of the casing. The Division must be given reasonable notice of any such test.*
- d. Pressure curves for the prevention of blowout equipment (BOPE) must be submitted to the Division at the conclusion of the test.*

Sec. 17. NAC 522.270 is hereby repealed:

~~NAC 522.270 Wells drilled with cable tools. The following applies to all wells drilled with cable tools:~~

- ~~1. Before drilling begins, adequate slush pits must be constructed.~~
- ~~2. Surface casing must be set in the same manner as described in NAC 522.265. Surface casing must be tested by bailing or pressure test to ensure a shutoff before drilling proceeds below the casing point.~~
- ~~3. The use of blowout equipment must be in accordance with good established oil field practice. After cementing the surface casing, a well being drilled must be equipped with adequate blowout preventers. All equipment must be in good operating condition at all times.~~
- ~~[Div. of Mineral Res., § 211, eff. 12-20-79]~~

Sec. 18. NAC 522.342 is hereby amended to read as follows:

NAC 522.342 Administrative fee. ([NRS 522.150](#))

1. The amount of the administrative fee that a producer or purchaser of oil or natural gas must pay pursuant to subsection 2 of [NRS 522.150](#) is [~~10 cents~~] *20 cents* per barrel of oil or per 50,000 cubic feet of natural gas, as appropriate.

2. Administrative fees shall be paid on or before the last day of each month and shall include a fee proportional to the amount of oil or natural gas produced in that month.

Sec. 19. NAC 522.343 is hereby repealed:

~~NAC 522.343 Reduced administrative fee for new production. (NRS 522.040, 522.150)~~

~~—1. Notwithstanding the provisions of NAC 522.342, the amount of the administrative fee that a producer or purchaser of oil or natural gas must pay pursuant to subsection 2 of NRS 522.150 for new production is one half cent per barrel of oil or per 50,000 cubic feet of natural gas, as appropriate, and in accordance with the provisions of this section.~~

~~—2. Upon the filing of Form 5, the well completion report, pursuant to NAC 522.510, the division shall determine whether the production from the well that is the subject of the report qualifies as new production. If the division determines that the production from the well qualifies as new production, the producer or purchaser is entitled to pay the administrative fee required by subsection 2 of NRS 522.150 for that new production at the reduced rate prescribed in subsection 1 for 12 consecutive calendar months, beginning on the put-on-production date reported in Form 5 for that well. At the end of the 12-month period, the producer or purchaser must pay the administrative fee required by NRS 522.150 for further production from the well in the amount prescribed in NAC 522.342.~~

~~—3. A producer or purchaser may, pursuant to NRS 522.110, challenge a determination made by the division pursuant to subsection 2.~~

~~—4. As used in this section, “new production” means production from a new or existing well that is completed in a new interval, as determined by the division.~~

~~—(Added to NAC by Comm’n on Mineral Resources by R165-99, eff. 1-27-2000)~~

Reviser’s Note:

~~—The regulation of the commission on mineral resources filed with the secretary of state on January 27, 2000 (LCB File No. R165-99), the source of NAC 522.343 (section 1 of the regulation), contains the following provision not included in NAC:~~

~~—“Sec. 2. If the commission on mineral resources repeals section 1 of this regulation [NAC 522.343], a producer or purchaser of oil or natural gas who, on the date that~~

~~section is repealed, is paying the administrative fee required by subsection 2 of NRS 522.150 at the reduced rate set forth in that section, is entitled to continue paying the administrative fee at the reduced rate until the end of the 12-month period for which the reduced rate applies.”~~

END OF PROPOSED CHANGES TO NAC 522

BELOW IS THE ENTIRE EXISTING REGULATION

CHAPTER 522 - OIL AND GAS

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GENERAL PROVISIONS

NAC 522.010 Definitions. As used in this chapter, unless the context otherwise requires, the words and terms defined in [NRS 522.020](#) and [NAC 522.018](#) to [522.170](#), inclusive, have the meanings ascribed to them in those sections.

[Div. of Mineral Res., § 106, eff. 12-20-79]—(NAC A by Dep’t of Minerals, 7-22-87)

NAC 522.018 “Administrator” defined. “Administrator” means the Administrator of the division.

(Added to NAC by Dep’t of Minerals, eff. 7-22-87)—(Substituted in revision for NAC 522.083)

NAC 522.020 “Atmospheric pressure” defined. “Atmospheric pressure” means the pressure or weight of air at sea level, equivalent to 14.73 pounds per square inch.

[Div. of Mineral Res., § 108, eff. 12-20-79]

NAC 522.025 “Barometric pressure” defined. “Barometric pressure” means the pressure or weight of air determined by the use of a barometer at a given point.

[Div. of Mineral Res., § 109, eff. 12-20-79]

NAC 522.030 “Barrel” defined. “Barrel” means 42 U.S. gallons, measured at standard conditions of pressure and temperature.

[Div. of Mineral Res., § 110, eff. 12-20-79]

NAC 522.035 “Blowout” defined. “Blowout” means an uncontrolled escape of drilling fluid, water, oil or gas from a well.

[Div. of Mineral Res., § 111, eff. 12-20-79]

NAC 522.040 “Blowout preventer” defined. “Blowout preventer” means a control attached to the wellhead which is equipped with gates, rams or other packoff which can be closed around the drill pipe or cable tools and which completely closes the top of the casing.

[Div. of Mineral Res., § 112, eff. 12-20-79]

NAC 522.045 “Bottom hole pressure” defined. “Bottom hole pressure” means the pressure in pounds per square inch under conditions existing at or near the producing horizon.

[Div. of Mineral Res., § 113, eff. 12-20-79]

NAC 522.050 “Casing pressure” defined. “Casing pressure” means the pressure between the casing and tubing when the casing and tubing are packed off at the top of the well.

[Div. of Mineral Res., § 114, eff. 12-20-79]

NAC 522.055 “Casinghead gas” defined. “Casinghead gas” means any gas, vapor, or both, indigenous to an oil stratum and produced from the stratum with oil.

[Div. of Mineral Res., § 115, eff. 12-20-79]

NAC 522.060 “Condensate” defined. “Condensate” means the liquid recovered at the surface from condensation by reduced pressure or temperature of gaseous petroleum hydrocarbons in the reservoir.

[Div. of Mineral Res., § 116, eff. 12-20-79]

NAC 522.065 “Cubic foot of gas” defined. “Cubic foot of gas” means the volume of gas contained in one cubic foot of space at standard conditions.

[Div. of Mineral Res., § 117, eff. 12-20-79]

NAC 522.070 “Day” defined. “Day” means 24 consecutive hours from 7 a.m. to the following 7 a.m.

[Div. of Mineral Res., § 118, eff. 12-20-79]

NAC 522.075 “Developed area,” “developed unit” defined.

1. “Developed area” or “developed unit” means an area or unit having a completed well which is capable of producing oil or gas in profitable quantities.

2. If the division finds that any part of a unit is nonproductive, the developed area of the unit includes only that part which is productive.

[Div. of Mineral Res., § 119, eff. 12-20-79]—(NAC A by Dep’t of Minerals, 7-22-87)

NAC 522.078 “Division” defined. “Division” means the division of minerals of the commission on mineral resources.

(Added to NAC by Dep’t of Minerals, eff. 7-22-87)—(Substituted in revision for NAC 522.073)

NAC 522.080 “Drilling fluid” defined. “Drilling fluid” means any fluid commonly used in the petroleum industry for the purpose of drilling and removing cuttings from a well.

[Div. of Mineral Res., § 120, eff. 12-20-79]

NAC 522.085 “Exploratory well” defined.

1. “Exploratory well” means a well drilled in an unproven area.

2. The term includes a well drilled into unproven formations.

[Div. of Mineral Res., § 121, eff. 12-20-79]

NAC 522.090 “Gas to oil ratio” defined. “Gas to oil ratio” means the ratio of production of gas in standard cubic feet to oil in barrels produced concurrently.

[Div. of Mineral Res., § 122, eff. 12-20-79]

NAC 522.095 “Gas repressuring” defined. “Gas repressuring” means introduction of any gas into a pool in order to replenish, replace or increase the reservoir energy.

[Div. of Mineral Res., § 123, eff. 12-20-79]

NAC 522.100 “Gas well” defined. “Gas well” means a well which produces primarily natural gas or any well classified as a gas well by the division.

[Div. of Mineral Res., § 124, eff. 12-20-79]—(NAC A by Dep’t of Minerals, 7-22-87)

NAC 522.105 “Mud-laden fluid” defined. “Mud-laden fluid” means any approved mixture of fluids and clay or other material commonly used in the petroleum industry for drilling, abandonment or emergency conditions which will effectively prevent migration of fluids within the well bore.

[Div. of Mineral Res., § 125, eff. 12-20-79]

NAC 522.110 “Multiple completion” defined. “Multiple completion” means the completion of any well so as to permit the production from more than one pool, with the production from each pool completely segregated from the production of other pools.

[Div. of Mineral Res., § 126, eff. 12-20-79]

NAC 522.115 “Oil well” defined. “Oil well” means any well which is not a gas well and which is capable of producing oil or condensate.

[Div. of Mineral Res., § 127, eff. 12-20-79]

NAC 522.120 “Operator” defined. “Operator” means a person, acting for himself or as an agent for others, designated to the division as the one who has the primary responsibility for complying with the division’s regulations.

[Div. of Mineral Res., § 128, eff. 12-20-79]—(NAC A by Dep’t of Minerals, 7-22-87)

NAC 522.125 “Potential” defined. “Potential” means the daily ability of a well to produce oil or gas as determined by a test approved or witnessed by the division or its authorized representative.

[Div. of Mineral Res., § 129, eff. 12-20-79]—(NAC A by Dep’t of Minerals, 7-22-87)

NAC 522.130 “Pressure maintenance” defined. “Pressure maintenance” means any practice which tends to preserve all or part of the original reservoir pressure.

[Div. of Mineral Res., § 130, eff. 12-20-79]

NAC 522.135 “Proven oil or gas land” defined. “Proven oil or gas land” means an area which has been shown by development or geological information to be such that any additional wells drilled in the area are reasonably sure to be productive of oil, gas, or both.

[Div. of Mineral Res., § 131, eff. 12-20-79]

NAC 522.140 “Seismic hole” defined. “Seismic hole” means a drilled hole which is intended for geophysical survey purposes only.

[Div. of Mineral Res., § 132, eff. 12-20-79]

NAC 522.145 “Separator” defined. “Separator” means an apparatus for separating oil, gas and water at the surface as they are produced from a well.

[Div. of Mineral Res., § 133, eff. 12-20-79]

NAC 522.150 “Shut-in pressure” defined. “Shut-in pressure” means the gauge pressure noted at the wellhead when the well is completely shut in.

[Div. of Mineral Res., § 134, eff. 12-20-79]

NAC 522.155 “Standard conditions” defined. “Standard conditions” means temperature at 60 degrees Fahrenheit and absolute pressure of 14.73 pounds per square inch.

[Div. of Mineral Res., § 135, eff. 12-20-79]

NAC 522.160 “Storage” defined. “Storage” means the confinement of produced gas, oil, or both, in tanks, reservoirs or containers.

[Div. of Mineral Res., § 136, eff. 12-20-79]

NAC 522.165 “Survey” defined. “Survey” means all electrical, directional and other tests made for the purposes of obtaining information.

[Div. of Mineral Res., § 137, eff. 12-20-79]

NAC 522.170 “Well log” defined.

1. “Well log” means a written record progressively describing the strata, water, oil or gas encountered in drilling a well, with additional information on volumes, pressure, rate of fill-up, water depths, caving strata, casing record and other data usually recorded in the normal procedure of drilling.

2. The term includes all logs run by the operator.

[Div. of Mineral Res., § 138, eff. 12-20-79]

NAC 522.175 Applicability of chapter.

1. The provisions of this chapter apply in all areas of the state unless otherwise stated in a special provision of NAC.

2. Special provisions of NAC will be adopted when required and will take precedence over general provisions if in conflict with them.

[Div. of Mineral Res., §§ 100 & 101, eff. 12-20-79]

NAC 522.185 Protection of fresh water.

1. Fresh water must be protected from pollution, whether in drilling, plugging or producing oil or gas, or in disposing of salt water already produced.

2. Oil or gas wells and wells drilled for exploratory purposes are governed by the provisions of this chapter which pertain to the drilling, safety, casing, production, abandoning and plugging of wells. All operations must be carried on so as to prevent pollution of any stream or other watercourse of this state, or of any subsurface water, as the result of the escape, release or injection of oil, gas or salt water from any well.

[Div. of Mineral Res., § 200 subsecs. 1 & 2, eff. 12-20-79]

NAC 522.190 Arrangements relating to conservation of oil and gas. The division may enter into arrangements with agencies of the state and the Federal Government, with committees representing private enterprise and with other persons for special projects, services and studies relating to conservation of oil and gas.

[Div. of Mineral Res., § 103, eff. 12-20-79]—(NAC A by Dep't of Minerals, 7-22-87)

NAC 522.195 Tentative approval of oral or telegraphed request. If the division gives tentative approval of an oral or telegraphed request or plan, the person requesting the approval must promptly submit the request or plan in writing on the proper form for final approval and confirmation by the division.

[Div. of Mineral Res., § 105, eff. 12-20-79]—(NAC A by Dep't of Minerals, 7-22-87)

DRILLING

NAC 522.210 Application for permit to drill.

1. Before any well is spudded or drilled for oil or gas, application must be made to and a permit obtained from the division.

2. The application must be made on Form 2, properly completed and accompanied by Form 1, the required fee and a location plat prepared by a land surveyor licensed in Nevada. Evidence of a federal bond for drilling on a federal lease must be included in the space provided on Form 2.

3. If the well is to be drilled on state or private land, Form 3 or 3a, properly completed, must accompany the application.

[Div. of Mineral Res., § 203, eff. 12-20-79]—(NAC A by Dep't of Minerals, 7-22-87)

NAC 522.212 Fee for permit to drill. ([NRS 522.050](#)) The amount of the fee that a person desiring to drill a well in search of oil or gas must pay pursuant to subsection 1 of [NRS 522.050](#) for a permit is \$200.

(Added to NAC by Comm'n on Mineral Resources by R069-99, eff. 8-19-99)

NAC 522.215 Cuttings: Requirements for permit; availability and use; notification of shortage. The taking of cuttings and the filing thereof is a condition for approval of the drilling permit, and this condition will be stated on the permit. A minimum of two 15-milliliter sets of cuttings per sampling interval must be cleaned, dried and placed in sample envelopes, and the cuttings and a split of any core submitted to the bureau of mines and geology as soon as the drilling of the well is complete. The bureau shall remove a 15-milliliter set and place the set in permanent storage. The rest of the cuttings must be made available for public inspection and testing at that time or, if the records concerning the well are to be kept confidential pursuant to [NAC 522.540](#), upon the expiration of the period of confidentiality. Destructive tests may be performed on the cuttings made available for public inspection and testing. The Administrator of the division must be notified by the bureau of any sample envelopes containing less than 5 milliliters of cuttings.

[Div. of Mineral Res., § 204, eff. 12-20-79]—(NAC A by Dep't of Minerals, 9-16-92)

NAC 522.220 Time limit of permit. Unless operations have been commenced and the operator is proceeding with due diligence, a permit to drill or deepen a well for oil or gas expires 24 months after the date of issue.

[Div. of Mineral Res., § 205, eff. 12-20-79]

NAC 522.225 Transfer of permit. If the person to whom a permit was originally issued disposes of all his operating interest in the well, he must submit a written statement to the division setting forth that fact and requesting that the permit be transferred to the person who has acquired the well. The transferee must furnish a bond as required in [NAC 522.230](#). The surety may be released or canceled by the transferor upon approval of the transfer by the division.

[Div. of Mineral Res., § 208, eff. 12-20-79]—(NAC A by Dep't of Minerals, 7-22-87)

NAC 522.230 Bonds and deposits.

1. To ensure that a well, upon abandonment, is plugged in accordance with the regulations of the division and that the well is operated and repaired in a manner which does not cause waste, the division may, except as otherwise provided in this section, require that the owner:

(a) Obtain a bond in favor of the State of Nevada in a sum of not less than \$10,000 for each well, or in a sum of not less than \$50,000 covering all wells being drilled or to be drilled in Nevada by one owner;

(b) Deposit money with the division in a sum of not less than \$10,000 for each well or in a sum of not less than \$50,000 covering all wells being drilled or to be drilled in Nevada by one owner; or

(c) Deposit with the division a savings certificate or time certificate of deposit issued by a bank or savings or loan association in Nevada and made payable to the State of Nevada, in a sum of not less than \$10,000 for each well or in a sum of not less than \$50,000 covering all wells being drilled or to be drilled in Nevada by one owner. All interest earned on the deposit accrues to the account of the owner of the well.

2. An owner of a well drilled on federal land who has previously deposited a bond with the Federal Government in a form and an amount equivalent to the form and amount approved by the division, is not required to obtain a bond or make the deposit with the division pursuant to this section for wells covered by the bond deposited with the Federal Government.

3. Any bond required by this section must be issued by a corporate surety authorized to do business in Nevada and must be approved and accepted by the division before deemed valid.

4. Any bond, savings certificate or time certificate of deposit required by this section must remain in effect until the well has been properly abandoned and plugged or repaired in accordance with this chapter or until it is formally released by the division.

[Div. of Mineral Res., § 209, eff. 12-20-79]—(NAC A by Dep't of Minerals, 7-22-87)

NAC 522.235 Location of wells. ([NRS 522.040](#)) In a proven oil and gas field the spacing of wells will be governed by special rules for each particular field, to be adopted by the division after notice and hearing. In the absence of a special order of the division establishing drilling units or authorizing different densities of wells or patterns of location for particular pools or parts of pools, the following requirements apply:

1. Each well drilled for oil with a projected depth of 5,000 feet or less must be located not less than 330 feet from the outside boundary of a government quarter-quarter section, or of a lot, tract or combination of lots or tracts substantially equivalent to a quarter-

quarter section as shown by the most recent government survey. Unless the Administrator, in his discretion, determines otherwise, only one well may be issued a permit to produce oil from the same reservoir within the same quarter-quarter section.

2. Each well drilled for oil with a projected depth of greater than 5,000 feet must be located not less than 330 feet from the outside boundary of a government quarter section, or of a lot, tract or combination of lots or tracts substantially equivalent to a quarter section as shown by the most recent government survey. Unless the Administrator, in his discretion, determines otherwise, only one well may be issued a permit to produce oil from the same reservoir within the same quarter section.

3. Each well drilled for gas with a projected depth of 5,000 feet or less must be located not less than 660 feet from the outside boundary of a government quarter section, or of a lot, tract or combination of lots or tracts substantially equivalent to a quarter section as shown by the most recent government survey. Unless the Administrator, in his discretion, determines otherwise, only one well may be issued a permit to produce gas from the same reservoir within the same quarter section.

4. Each well drilled for gas with a projected depth of greater than 5,000 feet must be located not less than 990 feet from the outside boundary of a government section, or of a lot, tract or combination of lots or tracts substantially equivalent to a section as shown by the most recent government survey. Unless the Administrator, in his discretion, determines otherwise, only one well may be issued a permit to produce gas from the same reservoir within the same section.

5. The requirements of this section for the location of a well do not apply to:

(a) Federal units.

(b) Wells drilled pursuant to a working interest agreement.

(c) Areas subject to existing orders for drilling and spacing.

6. The Administrator will determine the pattern for the location of wells which are adjacent to an area in which the spacing of wells is prescribed by the division or under application for spacing, where there is sufficient evidence to indicate that the pool or reservoir for which the spacing of wells is or will be prescribed by the division may extend beyond the boundary of the spacing order or application, and the uniformity of the pattern of spacing is necessary to ensure an orderly development of the pool.

7. As used in this section, the term “working interest agreement” means a written agreement entered into by the persons who are responsible for paying the cost of drilling one or more wells and that specifies the location of the well or wells.

[Div. of Mineral Res., § 201, eff. 12-20-79]—(NAC A by Dep't of Minerals, 7-22-87; A by Div. of Minerals by R156-98, 12-18-98)

NAC 522.240 Exceptions to location of wells and well spacing orders.

1. Upon proper application, the Administrator may approve an exception to [NAC 522.235](#) or to any order of the division establishing the spacing of wells for a pool.

2. An application for an exception must state fully the reasons the exception is necessary or desirable and must be accompanied by a plat showing:

(a) The locations at which an oil or gas well could be drilled in compliance with [NAC 522.235](#) or the applicable order;

(b) The location at which the applicant requests permission to drill; and

(c) The locations at which oil or gas wells have been or could be drilled in accordance with [NAC 522.235](#) or the applicable order:

(1) In a quarter section, for any oil well, regardless of depth, or any gas well of 5,000 feet or less; or

(2) In a section, for any gas well greater than 5,000 feet, directly or diagonally adjoining the quarter section or section for which the proposed exception is sought.

3. An exception approved by the Administrator does not affect the rights of owners of directly or diagonally adjoining tracts to drill for oil or gas.

[Div. of Mineral Res., § 202, eff. 12-20-79]—(NAC A by Dep't of Minerals, 7-22-87)

NAC 522.245 Change of location of well. If, before drilling a well, the person to whom the permit was originally issued desires to change the location, he must submit a letter so stating and another application properly filled out showing the new location. No additional fee is payable if the location change is within the same quarter-quarter section, but drilling must not be started until the new location has been approved.

[Div. of Mineral Res., § 207, eff. 12-20-79]

NAC 522.250 Identification of wells.

1. Each well which is being drilled or is capable of producing must be identified by a sign posted on the derrick or not more than 100 feet from the well.

2. The sign must be of durable construction. The lettering must be kept in legible condition and be large enough to be legible under normal conditions at a distance of 50 feet. The wells on each lease or property must be numbered in nonrepetitive, logical and distinctive sequence. Each sign must show the number of the well, the name of the lease, which must be different and distinctive for each lease, the name of the lessee, owner or operator and the location by quarter section, township and range.

3. The division will assign to each well an identification number of the American Petroleum Institute when the drilling permit is approved. This number must be used for identification in:

(a) Electronic data processing; and

(b) The forms listed in [NAC 522.480](#) to [522.530](#), inclusive, which must also show the name of the company, the number of the lease and the number of the well.

[Div. of Mineral Res., § 214, eff. 12-20-79]—(NAC A by Dep't of Minerals, 7-22-87)

NAC 522.255 Collecting pits.

1. No operator who conducts oil or gas development and production may use unlined collecting pits for storage and evaporation of brines from the oil field. The division may approve the use of impervious collecting pits in conjunction with approved operations for disposal of salt water.

2. The provisions of subsection 1 do not apply to burning pits which are used exclusively for the burning of the accumulated waste from the bottom of a tank.

[Div. of Mineral Res., § 200 subsec. 3, eff. 12-20-79]—(NAC A by Dep't of Minerals, 7-22-87)

NAC 522.260 Strata sealed off from other strata.

1. During the drilling of any oil or gas well, all strata bearing oil, gas or water above the producing horizon must be sealed or separated in order to prevent their contents from passing into other strata.

2. All fresh waters and waters of value or possible value for domestic, commercial or stock purposes must be confined to their respective strata and be adequately protected by methods approved by the division. Precautions must be taken in drilling and abandoning wells to guard against any loss of any fresh water from the strata in which it occurs, and the contamination of any fresh water by objectionable water or any oil or gas.

3. The operator of any well must shut off and exclude all water from any oil-or gas-bearing stratum to the satisfaction of the division.

[Div. of Mineral Res., § 212 eff. 12-20-79]—(NAC A by Dep't of Minerals, 7-22-87)

NAC 522.265 Wells drilled with rotary tools. Unless a special provision requires otherwise, the following applies to all wells drilled with rotary tools:

1. Suitable and safe surface casing must be used in all wells for proper anchorage. In all wells being drilled, surface and other protection casing must be run to sufficient depth to afford safe control of any pressures which might be encountered and must be sufficiently tested therefor. Surface casing must be set into an impervious formation and be cemented with sufficient cement to circulate to the top of the hole. If cement does not circulate, the annulus outside the casing must be cemented before drilling plug or initiating tests.

2. On all strings of casing below surface pipe, sufficient cement must be used to fill the annular volume behind the casing for a minimum distance of 500 feet above the bottom of the casing. A cement plug or shoe must not be drilled until a minimum compressive strength of 300 pounds per square inch at bottom hole conditions has been attained according to the manufacturer's tables of cement strength for the particular cement mix being used.

3. After cementing the surface casing, each well being drilled must be equipped with adequate blowout preventers. The use of blowout equipment must be in accordance with good established oil field practice. The control equipment must include casing outlet valves with adequate provisions for mudkill and bleed-off lines of proper size and working pressure. All equipment must be in good operating condition at all times.

[Div. of Mineral Res., § 210, eff. 12-20-79]

NAC 522.270 Wells drilled with cable tools. The following applies to all wells drilled with cable tools:

1. Before drilling begins, adequate slush pits must be constructed.

2. Surface casing must be set in the same manner as described in [NAC 522.265](#). Surface casing must be tested by bailing or pressure test to ensure a shutoff before drilling proceeds below the casing point.

3. The use of blowout equipment must be in accordance with good established oil field practice. After cementing the surface casing, a well being drilled must be equipped with adequate blowout preventers. All equipment must be in good operating condition at all times.

[Div. of Mineral Res., § 211, eff. 12-20-79]

NAC 522.275 Directional drilling.

1. Except for wells which are intentionally deviated, all wells must be drilled as nearly vertically as possible by normal, prudent and practical drilling operations. No interval in an oil well may be opened to the wellbore closer than 330 feet from the outer boundary of the lease on which the well is located, and no interval in a gas well may be opened to the well bore closer than 660 feet from the outer boundary of the lease on which the well is located.

2. Plans for directional drilling must be approved by the division before the drilling is begun. Upon completion of the well, a complete directional survey of the well, including a plat obtained by methods used for surveying wells must be filed with the division.

3. Deviation from the plan is permitted without the approval of the division for short distances to straighten the hole, sidetrack junk or correct other mechanical difficulties.

[Div. of Mineral Res., § 213, eff. 12-20-79]—(NAC A by Dep't of Minerals, 7-22-87)

NAC 522.280 Reentry. If a hole is being reentered for any purpose, other than for repairs or a routine cleanout which does not change the producing interval, the operator must file with the division a notice of intention on Form 4.

[Div. of Mineral Res., § 206, eff. 12-20-79]—(NAC A by Dep't of Minerals, 7-22-87)

PRODUCTION PRACTICES

NAC 522.300 Classification of wells and pools. The division will determine whether a particular well or pool is a gas or oil well or gas or oil pool, classify and reclassify wells and name pools accordingly, determine the limits of any pool producing oil or gas, and redetermine those limits as necessary.

[Div. of Mineral Res., § 104, eff. 12-20-79]—(NAC A by Dep't of Minerals, 7-22-87)

NAC 522.305 Ratio of gas to oil. The division will, after notice and hearing, impose a limit on any ratio of gas to oil for wells in a pool.

[Div. of Mineral Res., § 411, eff. 12-20-79]—(NAC A by Dep't of Minerals, 7-22-87)

NAC 522.310 Equipment for measurement.

1. Adequate facilities must be provided for efficient measurement of the gas and oil produced for the purpose of obtaining gas to oil ratios on each well and reporting oil, gas and water production.

2. Wellhead equipment must be installed and maintained in good working condition so that static bottom hole pressures of flowing wells may be obtained at any time.

3. Valves must be installed on both casing and tubing so that surface pressures can be readily measured at any time.

[Div. of Mineral Res., § 400, eff. 12-20-79]

NAC 522.315 Multiple completion of wells. No operator may permit multiple completion of a well without the approval of the division. The division may require adequate and complete separation, as determined by packer tests, of the various zones involved in the completions.

[Div. of Mineral Res., § 405, eff. 12-20-79]—(NAC A by Dep't of Minerals, 7-22-87)

NAC 522.320 Production from different strata through same casing. No operator may permit a well to produce either oil or gas from different strata through the same casing without first receiving written permission from the division.

[Div. of Mineral Res., § 404, eff. 12-20-79]—(NAC A by Dep't of Minerals, 7-22-87)

NAC 522.325 Production from several wells to common facilities. Common facilities may be used to receive the production from any number of wells, if adequate tankage and measuring equipment are installed so that production from each well can be accurately determined at reasonable intervals. The method for the measurement of production from each lease must be acceptable to the division.

[Div. of Mineral Res., § 412, eff. 12-20-79]—(NAC A by Dep't of Minerals, 7-22-87)

NAC 522.330 Periodic tests required to commingle production. The production from one pool may not be commingled on the surface with that from another pool except when the quantities from each source of production are determined by periodic well tests or other measurements.

[Div. of Mineral Res., § 406, eff. 12-20-79]

NAC 522.335 Initial testing of gas wells. Each gas well must be tested initially by the multipoint back pressure method at a time prescribed by the division.

[Div. of Mineral Res., § 408, eff. 12-20-79]—(NAC A by Dep't of Minerals, 7-22-87)

NAC 522.340 Gas produced or sold must be metered.

1. All gas must be metered when produced or sold with an approved meter of sufficient capacity. Gas may be metered from a lease or from property which is a unit if it is shown that ratable taking can be maintained.

2. Meters are not required for gas produced and used on the lease for purposes of development and operation of the lease.

3. Bypasses must not be connected around meters for the purpose of improper taking of gas.

[Div. of Mineral Res., § 409, eff. 12-20-79]—(NAC A by Dep't of Minerals, 7-22-87)

NAC 522.342 Administrative fee. ([NRS 522.150](#)) The amount of the administrative fee that a producer or purchaser of oil or natural gas must pay pursuant to subsection 2 of [NRS 522.150](#) is 10 cents per barrel of oil or per 50,000 cubic feet of natural gas, as appropriate.

(Added to NAC by Comm'n on Mineral Resources by R069-99, eff. 8-19-99)

NAC 522.343 Reduced administrative fee for new production. ([NRS 522.040](#), [522.150](#))

1. Notwithstanding the provisions of [NAC 522.342](#), the amount of the administrative fee that a producer or purchaser of oil or natural gas must pay pursuant to subsection 2 of [NRS 522.150](#) for new production is one-half cent per barrel of oil or per 50,000 cubic feet of natural gas, as appropriate, and in accordance with the provisions of this section.

2. Upon the filing of Form 5, the well completion report, pursuant to [NAC 522.510](#), the division shall determine whether the production from the well that is the subject of the report qualifies as new production. If the division determines that the production from the well qualifies as new production, the producer or purchaser is entitled to pay the administrative fee required by subsection 2 of [NRS 522.150](#) for that new production at the reduced rate prescribed in subsection 1 for 12 consecutive calendar months, beginning on the put-on-production date reported in Form 5 for that well. At the end of the 12-month period, the producer or purchaser must pay the administrative fee required by [NRS 522.150](#) for further production from the well in the amount prescribed in [NAC 522.342](#).

3. A producer or purchaser may, pursuant to [NRS 522.110](#), challenge a determination made by the division pursuant to subsection 2.

4. As used in this section, “new production” means production from a new or existing well that is completed in a new interval, as determined by the division.

(Added to NAC by Comm’n on Mineral Resources by R165-99, eff. 1-27-2000)

Reviser’s Note.

The regulation of the commission on mineral resources filed with the secretary of state on January 27, 2000 (LCB File No. R165-99), the source of [NAC 522.343](#) (section 1 of the regulation), contains the following provision not included in NAC:

“Sec. 2. If the commission on mineral resources repeals section 1 of this regulation [[NAC 522.343](#)], a producer or purchaser of oil or natural gas who, on the date that section is repealed, is paying the administrative fee required by subsection 2 of [NRS 522.150](#) at the reduced rate set forth in that section, is entitled to continue paying the administrative fee at the reduced rate until the end of the 12-month period for which the reduced rate applies.”

NAC 522.345 Utilization of gas.

1. Gas from an oil well may be used for:

(a) Light or fuel;

(b) Efficient manufacture of chemicals;

(c) Reinjection to increase the ultimate recovery of hydrocarbons or for storage;

(d) The extraction of liquid hydrocarbons from the gas if the gas is not wasted; or

(e) The artificial lifting of oil from a pool if all gas returned to the surface is then used without waste.

2. No gas from a gas well may be permitted to escape into the air without the approval of the division except:

(a) When required for safety;

(b) When required for initial testing of a well; or

(c) To lift oil artificially from a pool in cases of operational necessity if the escape is permitted for no more than 5 days within any 30-day period.

3. The disposition of gas produced by each gas well must be reported each month on Form 7.

[Div. of Mineral Res., § 410, eff. 12-20-79]—(NAC A by Dep't of Minerals, 7-22-87)

NAC 522.350 Open reservoirs. Oil or the waste from an oil field may not be stored or retained in unlined pits in the ground or open receptacles without the approval of the division.

[Div. of Mineral Res., § 407, eff. 12-20-79]—(NAC A by Dep't of Minerals, 7-22-87)

NAC 522.355 Removal of rubbish and debris. Any rubbish or debris which might constitute a fire hazard must be removed to a distance of at least 100 feet from any well, tank or separator. Waste oil must be burned or disposed of in a manner approved by the division of environmental protection of the state department of conservation and natural resources.

[Div. of Mineral Res., § 402, eff. 12-20-79]

NAC 522.360 Dikes and fire walls. Dikes or fire walls are required around permanent tanks for the storage of oil located within the corporate limits of any city or town, where tanks for storage are less than 500 feet from any highway or inhabited dwelling, less than 1,000 feet from any school or church or are so located as to be deemed by the division to be a hazard.

[Div. of Mineral Res., § 401, eff. 12-20-79]—(NAC A by Dep't of Minerals, 7-22-87)

NAC 522.365 Report of fire, lightning strike, break or leak, or overflow.

1. Each operator of an oil or gas well, pipeline, receiving tank, tank for storage or receiving or receptacle for storage in which oil or gas is produced, received or stored, or through which oil or gas is piped or transported, shall notify the division by letter, giving full details, of each:

- (a) Fire at a well, tank or receptacle or along a pipeline;
- (b) Lightning strike to a well, tank or receptacle or along a pipeline;
- (c) Break or leak; or
- (d) Overflow,

which results in a loss of more than 50 barrels of oil or 1,500,000 cubic feet of gas.

2. Each report required by this section must contain:

(a) A description of the location of the incident by section, township and range, designating the property with sufficient particularity to permit the division to determine the exact location of the incident;

(b) Information setting forth the steps which have been taken or are being taken to remedy the situation reported; and

(c) Detailed information on the amount of oil or gas lost, destroyed or permitted to escape.

[Div. of Mineral Res., § 403, eff. 12-20-79]—(NAC A by Dep't of Minerals, 7-22-87)

UNDERGROUND DISPOSAL OF WASTE FLUID BY INJECTION

NAC 522.380 Procedure for underground disposal of water.

1. The underground disposal of salt water, brackish water or other water unfit for domestic use or for livestock, irrigation or other use is permitted only upon approval of the Administrator.

2. Disposal wells must be cased and the casing cemented in such a manner that no damage is caused to fresh water, oil, gas or other minerals. All injection must be through tubing and below the packer unless another means is approved by the Administrator.

3. The application to dispose of salt water, brackish water or other water unfit for domestic use or for livestock, irrigation or other use must be verified by the applicant and filed in duplicate with the division. The application must include:

(a) A plat showing the location of each disposal well and the location of all oil and gas wells, including abandoned wells, wells being drilled and dry holes, and the names of lessees of record of land within one-half mile of the proposed disposal well;

(b) The formation and depths to which all wells are currently completed;

(c) The name, description and depth of the formation into which water is to be injected;

(d) Logs of each disposal well, or a description of the typical stratigraphic level of the disposal formation in each disposal well;

(e) A description of the casings in each disposal well of the proposed casing program, and the proposed method for testing the casings before use of each disposal well;

- (f) A statement specifying the source of water to be injected;
- (g) The estimated minimum and maximum amount of water to be injected daily;
- (h) The estimated minimum injection pressure; and
- (i) The names and addresses of the operator of the project.

[Div. of Mineral Res., § 600, eff. 12-20-79]—(NAC A by Dep't of Minerals, 7-22-87)

ENHANCED RECOVERY AND PRESSURE MAINTENANCE

NAC 522.400 Permit for secondary recovery operations required.

1. Any method for maintaining pressure or recovering additional oil or gas, other than a method consisting of primary recovery techniques, may be used only upon approval of the Administrator. Such approval may be obtained by an application filed in accordance with the provisions of [NAC 522.600](#) to [522.625](#), inclusive.

2. The application for a permit must contain:

(a) A plat showing the unit, lease or group of leases included within the proposed project, the location of the proposed intake well, and oil and gas wells, including abandoned wells, wells being drilled and dry holes, and the names of all operators of adjoining leases;

(b) The formations and depths to which all wells are currently completed;

(c) The name, description and depth of the formation to be affected by injection;

(d) The logs of any existing intake wells or any information which is available;

(e) A description of the casing for the intake well or the proposed casing program, and the proposed method for testing casing before use of the input wells;

(f) A statement of the injection medium to be used, its sources and the estimated amounts to be injected daily;

(g) A tabulation showing recent ratios of gas to oil and the results of tests for the production of oil and water for each of the producing oil and gas wells in the project;

(h) A statement of the plan and rate of development of the area included within the project; and

(i) The names and addresses of the operator of the project.

[Div. of Mineral Res., § 500, eff. 12-20-79]—(NAC A by Dep't of Minerals, 7-22-87)

NAC 522.405 Notification of injection operations.

1. Upon beginning to inject any fluids into an injection well, the operator shall notify the division of the date on which injection began.

2. Within 10 days after the injection of fluids is discontinued, the operator shall notify the division of the date of discontinuation and the reasons therefor.

3. Before any intake well is plugged, the owner must give notice to the division. The procedure prescribed in [NAC 522.445](#) for the plugging of oil and gas wells must be followed.

[Div. of Mineral Res., § 503, eff. 12-20-79]—(NAC A by Dep't of Minerals, 7-22-87)

NAC 522.410 Casing for injection wells. Wells used for injection of gas, air, water or fluids into the producing formation must be cased with safe and adequate casing, and the casing must be cemented to prevent leakage or damage to oil, gas or fresh water. All injections must be through tubing and below the packer unless another means is approved by the Administrator.

[Div. of Mineral Res., § 502, eff. 12-20-79]—(NAC A by Dep't of Minerals, 7-22-87)

NAC 522.415 Records and reports. Each operator shall keep accurate records showing the amount of oil produced, volumes of fluid or gas injected and injection pressure. Each operator shall file with the division, on Forms 7 and 7A, a monthly report showing all produced and injected volumes and other data required by the division.

[Div. of Mineral Res., § 504, eff. 12-20-79]—(NAC A by Dep't of Minerals, 7-22-87)

ABANDONMENT AND PLUGGING

NAC 522.430 Temporary abandonment of well.

1. Each well in which production casing has been run but which has not been operated for 1 year, and each well in which no production casing has been run and for which drilling operations have ceased for 30 days, must be immediately plugged.

2. The Administrator may, for good cause, grant an additional 6 months for the well to be plugged.

[Div. of Mineral Res., § 305, eff. 12-20-79]—(NAC A by Dep't of Minerals, 7-22-87)

NAC 522.435 Notice of intention to abandon.

1. Before beginning work for the abandonment of any well, including a well being drilled, an oil or gas well, water well or a dry hole, notice of intention to abandon must be filed with the division and approval for the abandonment must be obtained from the division.

2. The notice must:

(a) Show the reason for abandonment;

(b) Be accompanied by a detailed statement of the proposed work, including a description of the kind, location and size of plugs by depth, plans for mudding, cementing, shooting, testing and removing casing, and any other pertinent information; and

(c) Be filed with the division on Form 4 or, if the well is drilled on leases from the United States Government, filed by submitting to the division two copies of the notice given to the state director of the Bureau of Land Management of the Department of the Interior.

3. Oral permission obtained in advance does not relieve the operator of the necessity of filing written notice.

[Div. of Mineral Res., § 300, eff. 12-20-79]—(NAC A by Dep't of Minerals, 7-22-87)

NAC 522.440 Responsibility for plugging. The operator of any well which has been drilled for oil or gas, or any seismic, core or other exploratory hole, whether cased or uncased, is responsible for the plugging of the well or hole.

[Div. of Mineral Res., § 306, eff. 12-20-79]

NAC 522.445 Method of plugging.

1. Each abandoned well or hole must be plugged by or on behalf of the owner, operator or producer who is in charge of the well and responsible for it.

2. Before any well is abandoned, it must be plugged in a manner which will permanently confine all oil, gas and water to the separate strata which originally contained them. Unless a different method and procedure is approved by the division, upon application by the owner, operator or producer on Form 4, the method and procedure for plugging the well is as follows:

(a) The hole must be filled with mud-laden fluid and a permanent type of bridge plug must be placed at the top of each hydrocarbon-producing formation open to the wellbore, or a cement plug not less than 100 feet in length must be placed immediately above each hydrocarbon-producing formation open to the wellbore.

(b) A cement plug not less than 100 feet in length must be placed at approximately 50 feet below and 50 feet above the interface between brackish and fresh water.

(c) A 50-foot concrete plug must be placed at or near the surface of the ground in each hole.

(d) The interval between plugs must be filled with heavy mud-laden fluid which will effectively seal the formation to which it is applied.

(e) An uncased hole must be plugged with heavy mud up to the base of the surface string and a cement plug not less than 100 feet in length must be placed and centered as nearly as practicable at the base of the surface casing.

3. Before any hole drilled for seismic, core or other exploratory purpose is abandoned, the owner or driller must plug it so as to protect properly all water-bearing formations. The method and procedure for plugging an exploratory hole is as follows:

(a) The hole must be filled to the top with the original cuttings or gravel.

(b) If artesian flow is encountered, the hole must be filled with the original cuttings or gravel to 50 feet below the surface and plugged from 50 feet to the surface with concrete, to prevent the waste of water.

[Div. of Mineral Res., §§ 301 & 303, eff. 12-20-79]—(NAC A by Dep't of Minerals, 7-22-87)

NAC 522.450 Water wells.

1. If a well or exploratory hole which is to be plugged may safely be used as a fresh-water well, and the landowner wishes so to use it, the well need not be filled above the required sealing plug set below the fresh-water stratum. Written authority for use of the well or hole as a water well must be secured from the landowner on Form 10 and filed with and approved by the division. Authority from the landowner must also include the assumption of full responsibility by the landowner for the final plugging of the well.

2. Approval by the division to convert the well to a fresh-water well and approval of the plugging of the well to the base of the fresh-water producing stratum releases and discharges the principal and surety from any liability under any bond given to assure that the well would be properly plugged and abandoned.

[Div. of Mineral Res., § 304, eff. 12-20-79]—(NAC A by Dep't of Minerals, 7-22-87)

NAC 522.455 Restoration of surface and removal of debris. The operator shall, as soon as weather and ground conditions permit, upon final abandonment and completion of the plugging of any well, clear the area around the well of all refuse, drain and fill all excavations, remove concrete bases, machinery and materials, and level the surface to leave the site as close to its condition when operations were commenced as practicable.

[Div. of Mineral Res., § 308, eff. 12-20-79]

NAC 522.460 Marker for abandoned well.

1. Unless the owner of the surface land submits a request to the division that an abandoned well not be marked, and the Administrator, in his discretion, grants the request, the location of the abandoned well must be shown by steel marker at least 4 inches in diameter and at least 10 feet long set in concrete and extending at least 4 feet above ground level.

2. The marker must bear the name of the operator and the name, number and description of the location of the well. This information must be bead-welded or stamped directly to the marker pipe. The top of the pipe must be closed with a cement plug, screw cap or welds.

[Div. of Mineral Res., § 302, eff. 12-20-79]—(NAC A by Dep't of Minerals, 7-22-87)

NAC 522.465 Record of plugging. Within 30 days after the plugging of a hole or well, a record of the plugging must be submitted to the division on Form 4.

[Div. of Mineral Res., § 307, eff. 12-20-79]—(NAC A by Dep't of Minerals, 7-22-87)

REPORTS

NAC 522.480 Books and records.

1. All producers, transporters, storers and handlers of crude petroleum oil and natural gas in Nevada shall keep, for at least 5 years, appropriate books and records covering their operations in Nevada to substantiate the reports required by [NAC 522.480](#) to [522.530](#), inclusive.

2. The division may require additional reports, data or other information on the production, transportation, storage or handling of crude petroleum oil or natural gas in Nevada if it is necessary or desirable to prevent waste and conserve natural resources.

[Div. of Mineral Res., §§ 700 & 701, eff. 12-20-79]—(NAC A by Dep't of Minerals, 7-22-87)

NAC 522.485 Forms required by chapter. Where the provisions of this chapter require forms to be filed, the forms listed in [NAC 522.490](#) to [522.530](#), inclusive, or other approved machine accounting forms, may be filed. Applicable forms of the United States Geological Survey may be filed in place of Forms 4, 5 and 7A.*

*(See agency for forms.)

[Div. of Mineral Res., § 702, eff. 12-20-79]

NAC 522.490 Form 1: Organization report.

1. Form 1 must be filed with the division by each person before drilling a first well in Nevada. An amended form must be filed when there is a change in any of the facts shown on the form.

2. Drilling permits will not be issued until Form 1 is received.

[Div. of Mineral Res., § 703, eff. 12-20-79]—(NAC A by Dep't of Minerals, 7-22-87)

NAC 522.495 Form 2: Application for permit to drill, deepen or plug back oil and gas wells.

1. A person who desires to drill, deepen or plug back any oil or gas well must file Form 2, properly completed, with the division. A fee of \$50 and a location plat must accompany the application for a permit to drill. No additional fee or location plat is required to deepen or plug back a well which has been drilled.

2. The location plat required by this section must be of convenient size, and must have the location of the proposed well within a 40-acre legal subdivision by an accurate course and distance tie to an established corner of a section or quarter section. The plat must contain a full description of the corner to which the tie is made, together with all markings thereon. Ties to offset section or quarter corners on township lines must also show the nearest corner of the adjoining township together with the offset distance. Lots within a lotted section must be shown and designated. The plat must indicate the method used in obtaining all bearings and must show the declination used for compass bearings and the source of the bearing if an angle is turned from a line of known bearing. The person who prepares the plat must note on the plat whether solar or polaris observations have been used.

[Div. of Mineral Res., § 704 subsecs. 1 & 2, eff. 12-20-79]—(NAC A by Dep't of Minerals, 7-22-87)

NAC 522.500 Forms 3 and 3a: Drilling bond.

1. Form 3,* properly prepared, must accompany the bond required by [NAC 522.230](#) for the drilling of a single well.

2. Form 3a,* properly prepared, must accompany the bond required by [NAC 522.230](#) for the drilling of more than one well.

*(See agency for form.)

[Div. of Mineral Res., § 705, eff. 12-20-79]

NAC 522.505 Form 4: Sundry notices and reports on wells.

1. Form 4 must be used to:

(a) Notify the division and request its approval of:

- (1) A change of plans.
- (2) A test of water shutoff.
- (3) A reentering or reopening of a plugged hole.
- (4) A shooting, acidizing or fracture treating.
- (5) A pulling or altering of casing.
- (6) An intention to abandon a well.

Permission in advance does not relieve the operator of the requirement to file the notice.

(b) Report progress or completion of the activities designated in paragraph (a).

(c) Report the supplemental history of a well.

2. The presence of a representative of the division at the scene of any of the activities required to be reported on Form 4 or any approval of an activity of which the division must be notified on Form 4 does not relieve the operator of the requirement to file the form or the notice. The division may observe and report on these activities.

[Div. of Mineral Res., § 706, eff. 12-20-79]—(NAC A by Dep't of Minerals, 7-22-87)

NAC 522.510 Form 5: Well completion report.

1. Form 5, the well completion report, must be filed for all wells drilled in Nevada. In the case of a dry hole, this report may accompany Form 4. In the case of a well placed in commercial production, Form 5 must be filed with the division within 30 days after the well is placed in production. Only one Form 5 is required for each well. A second Form 5 is not required upon the abandonment of any producing well.

2. Two copies of all logging surveys run in the wellbore by the operator must be filed with the division. The division will file one of the sets with the bureau of mines and geology. The copy at the bureau will be available for public inspection when the records are no longer confidential.

[Div. of Mineral Res., § 707, eff. 12-20-79]—(NAC A by Dep't of Minerals, 7-22-87)

NAC 522.515 Form 7: Producer's monthly report.

1. A report of the production and sales of all oil, gas and water must be filed in quadruplicate with the division on or before the last day of the month following the month for which the report is made. Two copies of the report must be filed with the state treasurer with the remittance of the production tax. One copy must be retained by the producer.

2. All wells on a production status or shut-in for any part of the month must be included in the monthly report.

[Div. of Mineral Res., § 708, eff. 12-20-79]—(NAC A by Dep't of Minerals, 7-22-87)

NAC 522.520 Form 7A: Report of subsurface injections. The injection of fluid for secondary recovery, other pressure maintenance projects or water disposal must be reported on Form 7A to the division not later than 15 days after the period of the report.

[Div. of Mineral Res., § 709, eff. 12-20-79]—(NAC A by Dep't of Minerals, 7-22-87)

NAC 522.525 Form 8A: Notice of change of owner. Any owner or part owner who is bound under a drilling bond and who conveys his interest to another shall file Form 8A, notice of change of owner, with the division.

[Div. of Mineral Res., § 710, eff. 12-20-79]—(NAC A by Dep't of Minerals, 7-22-87)

NAC 522.530 Form 10: Water well completion release. When the lessor wishes to complete a dry hole which is capable of producing water as a water well, Form 10 must be filed with the division.

[Div. of Mineral Res., § 711, eff. 12-20-79]—(NAC A by Dep't of Minerals, 7-22-87)

NAC 522.540 Confidentiality of well records.

1. Records concerning a well will not be kept confidential by the division unless the owner of the well requests confidentiality in writing or marks “confidential” on the logs of an exploratory well. Upon receiving such a request or log, the division will keep the records confidential for 6 months after their receipt unless the owner provides a written authorization for an earlier release.

2. An operator who plans to drill a series of exploratory wells within a given region or area may apply to the division to have the records for all his exploratory wells kept confidential. Such an application must specifically describe the area to be explored and the number and location of exploratory wells contemplated. Upon approval of the application, the Administrator will keep all records of the project confidential for 6 months after receipt of the record. The operator may amend the plan of the project with the written approval of the Administrator.

(Added to NAC by Dep’t of Minerals, eff. 7-22-87)

RULES OF PRACTICE BEFORE DIVISION

NAC 522.600 Application for hearing; petition for rehearing.

1. Any interested person who desires a hearing before the division must file an application with the division. The application must state the purpose or subject for which the hearing is sought and be submitted in triplicate.

2. A petition for rehearing must be filed in the same manner.

[Div. of Mineral Res., § 800, eff. 12-20-79]—(NAC A by Dep’t of Minerals, 7-22-87)

NAC 522.605 Docket number. The Administrator will maintain a docket book, and all applications for hearings and all hearings called on the motion of the division must be docketed and given a docket number. A file carrying the docket number will be maintained by the division. Each application for a hearing and each original document or copy certified by the division will be stamped with the docket number of the hearing and placed and kept in the file.

[Div. of Mineral Res., § 801, eff. 12-20-79]—(NAC A by Dep’t of Minerals, 7-22-79)

NAC 522.610 Notice of hearing.

1. Notice of a hearing must be sent by the division to the applicant and all known interested parties at least 10 days before the date of hearing.

2. Upon request of a party to a hearing and for good cause shown, the hearing may be continued. A request to have the date of a hearing changed must be made to the Administrator at least 5 days before the date set for the hearing so that other parties can be advised. Requests may be granted or denied at the discretion of the Administrator.

3. If the matter set for hearing is determined by the division to be of general interest throughout the state, a notice of the hearing must be published in a newspaper of general circulation in Reno, in Las Vegas, and in an oil trade journal at least 2 weeks before the hearing.

[Div. of Mineral Res., §§ 802 & 803, eff. 12-20-79]—(NAC A by Dep't of Minerals, 7-22-87)

NAC 522.615 Depositions. The deposition of a witness for use in a hearing before the division may be taken in compliance with a stipulation between the parties concerned or with an order of the Administrator. If the deposition is to be taken by order of the Administrator, the parties concerned must be notified by certified mail at least 15 days before the date set for the deposition. The notice must set forth the name of the person to be questioned, the time and place of the deposition and the subject matter concerning which the person will be expected to testify.

[Div. of Mineral Res., § 809, eff. 12-20-79]—(NAC A by Dep't of Minerals, 7-22-87)

NAC 522.620 Conduct of hearings.

1. Hearings before the division will be conducted informally. A record of testimony will be taken and preserved as a part of the permanent records of the division.

2. The division may require any protest to be reduced to writing and filed with the division.

3. Before evidence is received:

(a) The Administrator will make a statement of matters officially noticed.

(b) The parties and the division may offer preliminary materials, including pleadings necessary to present the issues to be heard, motions, rulings, notices, proof of publication and orders of the division previously entered in the proceeding.

(c) The Administrator will rule on any pending motion.

(d) The Administrator will receive any stipulation of fact or stipulated exhibit.

(e) The Administrator will dispose of any preliminary matters appropriate for disposition.

(f) The Administrator will accept statements of appearances.

4. A witness may be examined and cross-examined by not more than one representative of each party. The Administrator will designate the order of examination.

5. Before closing the hearing and upon the request of a party, the Administrator may permit presentation of briefs. The order of presenting briefs and the time by which they must be filed must be determined by the Administrator after he consults with the parties.

6. The party who institutes the proceeding may open and close the presentation of proof. The Administrator will open and close the proceeding instituted by the division. An interested person must be heard immediately following the party with whom the interested person is allied in interest. The Administrator will designate the order of the presentation of proof.

[Div. of Mineral Res., §§ 804-806 & 808, eff. 12-20-79]—(NAC A by Dep't of Minerals, 7-22-87)

NAC 522.625 Record of proceedings. At all formal hearings, the record of the proceedings must be made by a reporter, or in the absence of a reporter, by a person designated by the Administrator. The cost of transcribing and reporting the hearing must be paid by the parties or by a party designated by the Administrator at the time of the hearing.

[Div. of Mineral Res., § 807, eff. 12-20-79]—(NAC A by Dep't of Minerals, 7-22-87)

Proposed Changes to Geothermal Resource Regulation in Chapter 534A

Sec. 20. NAC 534A270 is hereby amended to read as follows:

NAC 534A.270 Prevention of blowout; testing of casing and equipment for prevention of blowout. ([NRS 513.063](#), [534A.090](#))

1. All necessary precautions must be taken to keep wells under control and operating safely at all times. *Well control and well head assemblies used in any geothermal well must meet the minimum specifications of the American Petroleum Institute*

Specification (API) Recommended Practice 53 or its successor, or as may be approved by the division.

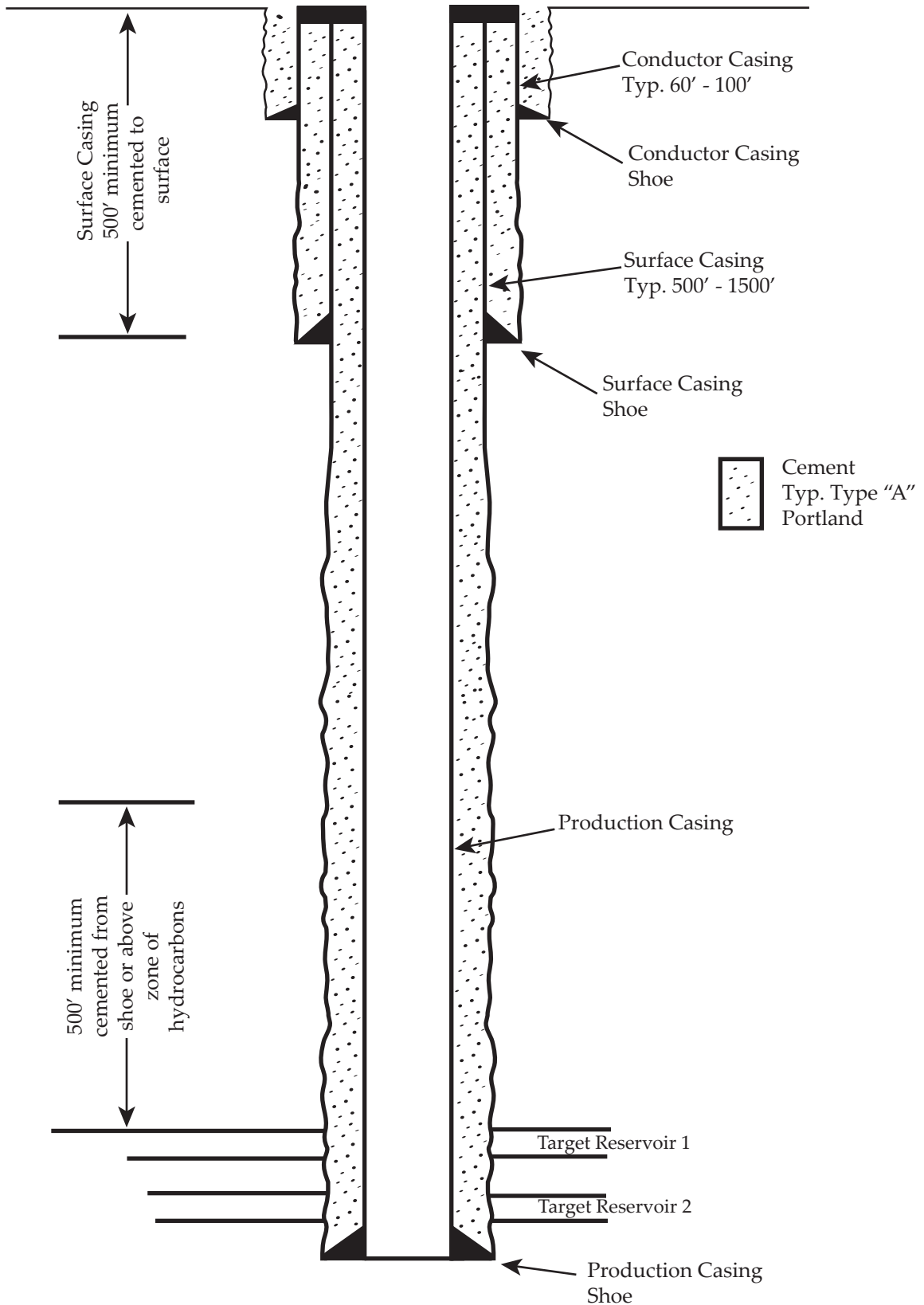
2. Equipment for the prevention of a blowout, capable of shutting in the well during any operation, must be installed on the surface casing and maintained ready for use at all times. This equipment must be made of steel and have a rating for pressure *of at least 3000 psig or* equal to the maximum anticipated pressure at the wellhead. Equipment for the prevention of a blowout is required on any well where temperatures may exceed 250°F.

3. Immediately after installation, the casing and equipment for the prevention of a blowout must be tested under pressure. These tests must be witnessed *or otherwise assured* by the Division *or an authorized representative* before the guide shoe is drilled out of the casing. The Division must be given reasonable notice of any such test. [~~If necessary, conductor pipe must be equipped with annular blowout equipment which is hydraulically activated from a remote control station.~~]

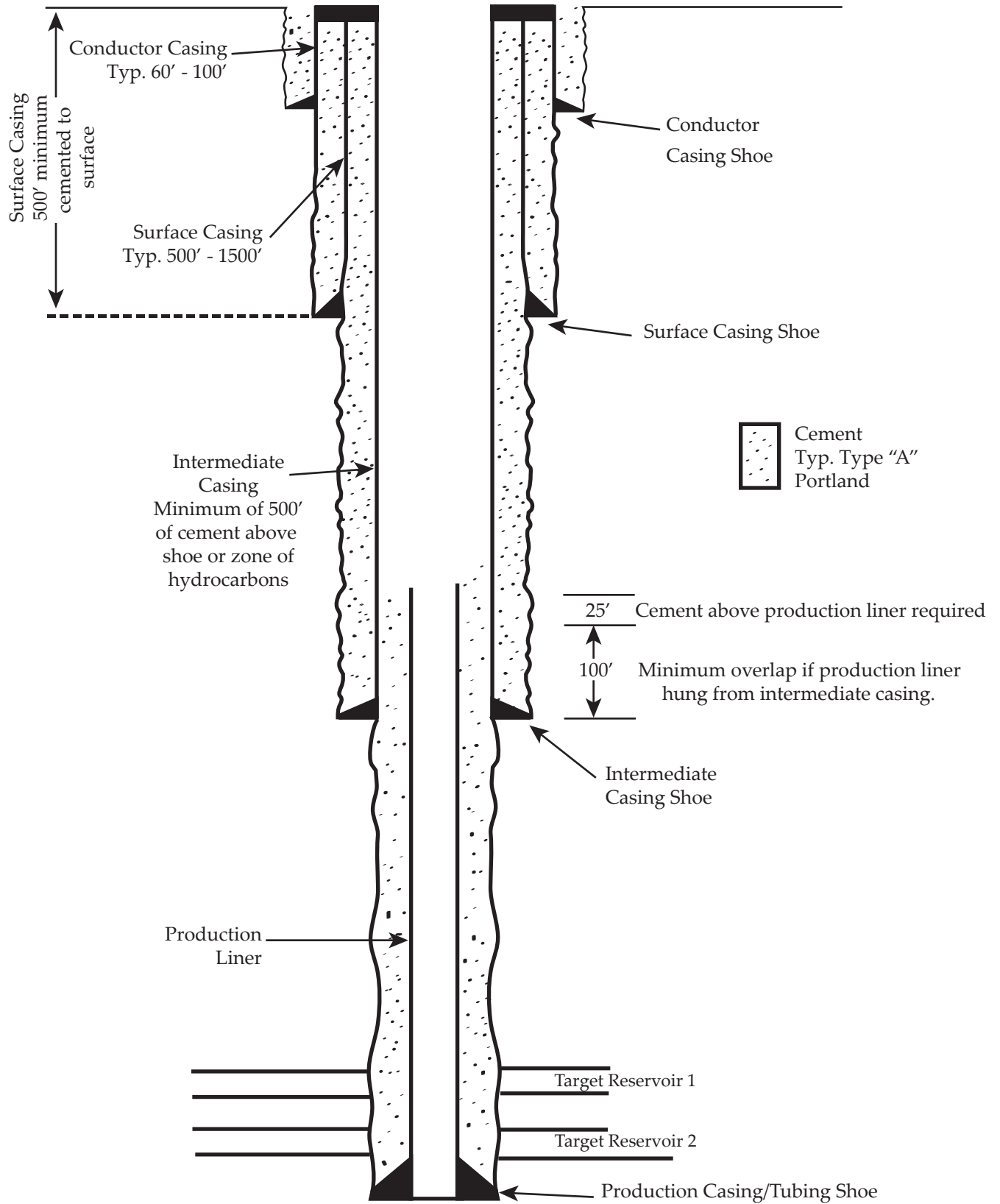
4. *Pressure curves for the prevention of blowout equipment (BOPE) must be submitted to the Division at the conclusion of the test.* [~~The use of any equipment for~~

~~the prevention of a blowout must be in accordance with established good practices of the oil field.]~~

Conventional Oil & Gas Well With Production Casing Only

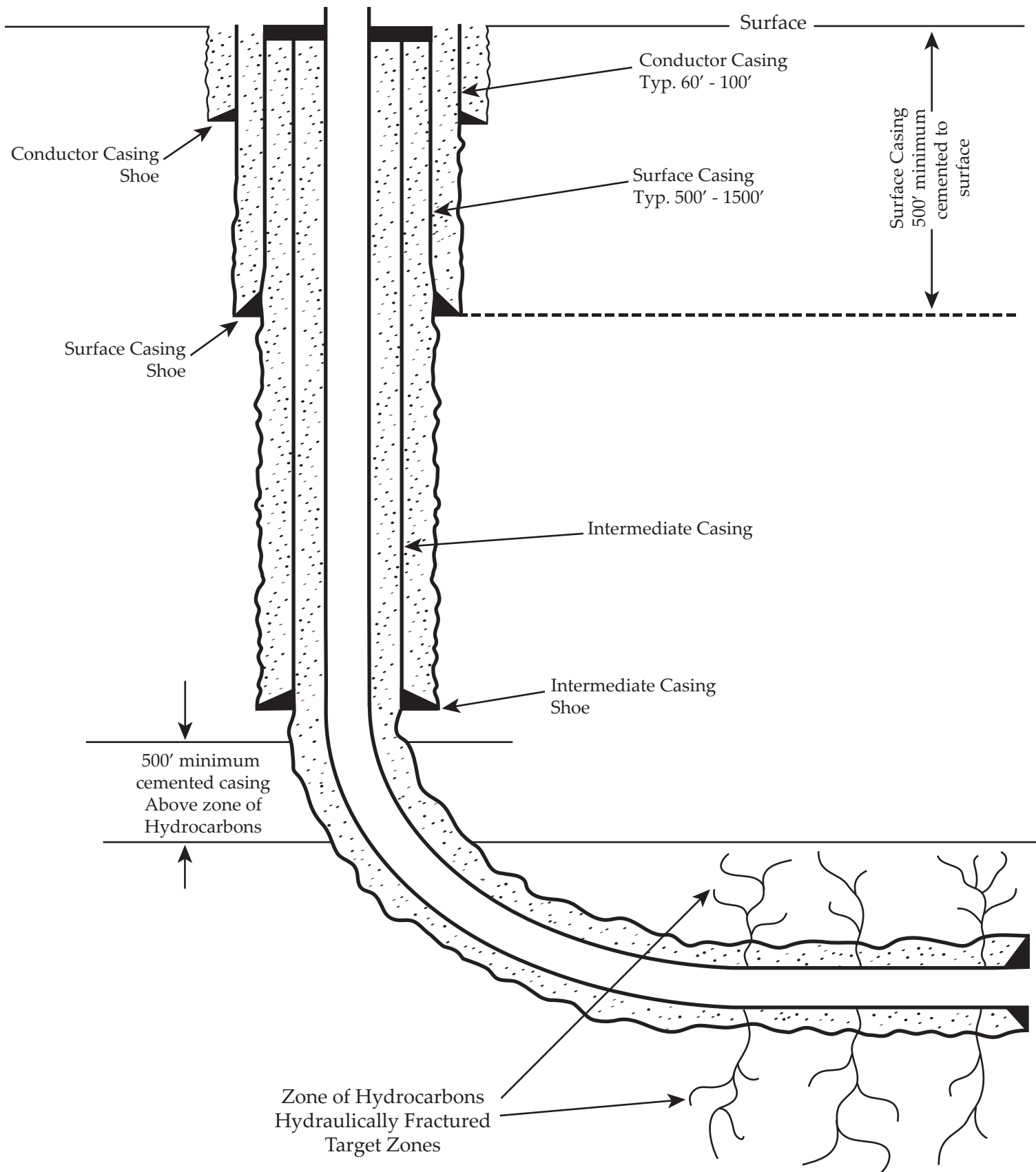


Conventional Oil & Gas Well With Intermediate Casing and Production Liner



Unconventional Oil & Gas Resource Well

Horizontal or Inclined



Unconventional Oil & Gas Resource Well

Vertical

