Submit 1 Copy To Appropriate District Office
District I – (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II – (575) 748-1283
811 S. First St., Artesia, NM 88210
District III – (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV – (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

EMNRD-OCD ARTESIA
REC'D: 6/02/2020

Form C-103
Revised July 18, 2013

WELL API NO.
30-015-21418

5. Indicate Type of Lease
STATE ☐ FEE ☒

6. State Oil & Gas Lease No.

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

7. Lease Name or Unit Agreement Name
Higgins Cahoon Com

1. Type of Well: Oil Well ☐ Gas Well ☒ Other

8. Well Number 1

2. Name of Operator
Fasken Oil and Ranch, Ltd.

9. OGRID Number
151416

3. Address of Operator
6101 Holiday Hill Road, Midland, TX 79707

10. Pool name or Wildcat
Atoka; Penn

4. Well Location
Unit Letter O : 990 feet from the South line and 1650 feet from the East line
Section 2 Township 18S Range 26E NMPM County Eddy

11. Elevation *(Show whether DR, RKB, RT, GR, etc.)*
3291' GR

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
PERFORM REMEDIAL WORK	☐	PLUG AND ABANDON	☒	REMEDIAL WORK	☐	ALTERING CASING	☐
TEMPORARILY ABANDON	☐	CHANGE PLANS	☐	COMMENCE DRILLING OPNS.	☐	P AND A	☐
PULL OR ALTER CASING	☐	MULTIPLE COMPL	☐	CASING/CEMENT JOB	☐		
DOWNHOLE COMMINGLE	☐						
CLOSED-LOOP SYSTEM	☐						
OTHER:	☐			OTHER:			☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Fasken Oil and Ranch, Ltd. Plan to plug the above well. Attached is our current and proposed WBD and our procedure.

SEE CHANGES TO PROCEDURE

Notify OCD 24 hrs. prior to any work done

Spud Date: Rig Release Date:

****SEE ATTACHED COA'S****

MUST BE PLUGGED BY 6/10/2021

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Addison Guelker TITLE Regulatory Analyst DATE 3/31/20

Type or print name Addison Guelker E-mail address: addisong@forl.com PHONE: 432-687-1777

For State Use Only

APPROVED BY: Gilbert Cordero TITLE Staff Manager DATE 6/10/2020
Conditions of Approval (if any):

Higgins Cahoon No. 1
990' FSL & 1650' FEL
Sec 2, T18S R26E
AFE 4054

OBJECTIVE:	**Plug and Abandon**
WELL DATA:	
API Number:	30-015-21318
13-3/8" 48#/ft H-40 casing:	Set at 1293' KB Cmt w/800 sx Howco Lite + 250 Sx "C" w/CaCl2. TOC surface, circ 150 sx
8-5/8" 24#/ft J-55 casing:	Set at 1904' KB, Cmt w/ 325 sx "C" w/ w/CaCl2. TOC 1075', by Temp survey.
5-1/2" 15.5# J-55,17#K-55 LT&C casing:	Set at 9012' Cmt w/500 sx "C" w/0.8% Halad-22, 5#/sk KCL. TOC 6500 by temp survey
Tubing:	272 jts 2-3/8" EUE 8rd N-80 tbg (8559.16'), 5-1/2 x 2-3/8 TAC, 35K shear, 9 jts 2-3/8" EUE 8rd N-80 tbg (290.54'), SN and 4' perf sub, EOT 8872.15'
Perfs:	Morrow 8635'-8654' (39 holes) 10-21-81 Morrow 8796'-8836' (102 holes), Orig 1-28-75, reperf 8-27-80
Rods and Pump:	See wellbore diagram or 11-15-07 pull report
Top of Milled PKR:	8897' Otis WB with 2-7/8" sub w/PN and "N" standing valve. EOT 8907'
TD:	9,072'
PBTD:	8920'

1. Test mast anchors.
2. RUPU.
3. Set pipe racks. Set flowback tank.
4. Release sucker rod on/off tool, POW w/ rods and swab tubing dry.
5. RIW w/rods, latch on/off tool and POW w/rods and pump.
6. RU pump truck and kill well w/ 30 bbls fresh water.
7. NDWH. NU BOP.
8. Release Mod "B" TAC (30k shear) at 8,576.96' KB and POW with 272 jts 2-3/8" EUE 8rd 4.7#/ft N-80 tubing (8,559.16'), TAC (2.80'), 9 jts 2-3/8" EUE 8rd 4.7#/ft N-80 tubing (290.54'), 2-3/8" EUE 8rd seating nipple (1.10'), and 2-3/8" EUE 8rd perf sub with collar(3.86').
9. RIW testing tubing to 6000 psi above slips with 5-1/2" 17# CIBP with setting tool, 2-3/8" drain nipple, 4' perforated sub, 2-3/8 EUE 8rd 4.7#/ft N-80 tubing, and set CIBP at +/-8,585' (minimum 50' above top perforation at 8635').
10. **Plug #1**: RU cement pump and spot 25 sx class "H" cement (1.17 cuft/sk yield) above CIBP 8,535' for a PBTD of 8,360'. Displace cement with fresh water. POW 10 stands and WOC 4 hours and tag plug at +/-8,360'.
11. RU pump truck and displace well from +/-8,360' with 75 bbls 9.5 ppg gel laden mud.
12. POW laying down +/-2,500' of /2-3/8" EUE 8rd 4.7#/ft N-80 tubing, PS, drain nipple, and setting tool, to +/-6,000'.
13. RIW with 4-1/2" AD-1 tension packer, SN, 2-3/8" EUE 8rd N80 tubing and set packer at +/-5,600'.
14. RUWL and 3000 psi lubricator. RIW with 1-11/16" strip gun and perforate 4 squeeze holes at 6,000'. RDWL.

15. **Plug #2**: RU cement pump, open 5-1/2" x 8-5/8" casing to pit. Squeeze perfs at 6,000' with 45 sx class "C" cement (1.32 cuft/sk yield) at 6,000' for a PBTD of 5,816'. Displace cement with 9.5 ppg gel laden mud. POW 10 stands and WOC 4 hours and tag plug at +/-~~5,816~~'.
5800' - 50' above Top of Wolfcamp
16. Release AD-1 packer and POW laying down +/-1,300' of tubing and set packer at +/-4,300'.

17. RUWL and 3000 psi lubricator. RIW with 1-11/16" strip gun and perforate 4 squeeze holes at 4,700'. RDWL.

18. **Plug #3**: Open 5-1/2" x 8-5/8" casing to flowback tank. Squeeze perfs at 4,700' with 45 sx Class "C" cement, displacing cement with 9.5 ppg gel laden mud to 4,516' or above. WOC 4 hours. Release packer RIW with tubing and TAG cement plug @ ~~or above~~ 4,~~516~~' and notify Midland Office and BLM of the results.
4475' - 50' above Top of Abo
Perf at 2519' and sqz perfs w/ 45 sx cmt - WOC and tag at 2335' - 50' above top of Glorieta
19. Release AD-1 packer and POW laying down +/-3,000' of tubing. Set 4-12/" AD-1 packer at +/-1,700'.

20. RUWL and 3000 psi lubricator. RIW with 1-11/16" strip gun and perforate 4 squeeze holes at 1,954'. RDWL.

21. **Plug #4**: (8-5/8" shoe plug): Open 5-1/2" x 8-5/8" casing to pit. Squeeze perfs at 1,954' with 45 sx Class "C" cement, displacing cement with 9.5 ppg gel laden mud to 1,770' or above. WOC 4 hours. Release packer RIW with tubing and TAG cement plug @ or above 1,770' and notify Midland Office and BLM of the results.

22. Release AD-1 packer and POW laying down +/-900' of tubing. Set 4-12/" AD-1 packer at +/-1,100'.

23. RUWL and 3000 psi lubricator. RIW with 1-11/16" strip gun and perforate 4 squeeze holes at 1,342'. RDWL.

24. **Plug #5**: Open 5-1/2" x 8-5/8" casing to pit. Squeeze perfs at 1,342' with 45 sx Class "C" cement, displacing cement with 9.5 ppg gel laden mud to 1,159' or above. WOC 4 hours. Release packer RIW with tubing and TAG cement plug @ or above 1,159' and notify Midland Office and BLM of the results.

25. Release AD-1 packer and POW laying down +/-500' of tubing. Set 4-1/2" AD-1 packer at +/-200'.

26. RUWL and 3000 psi lubricator. RIW with 1-11/16" strip gun and perforate 4 squeeze holes at 450'. RDWL.

27. **Plug #6**: Open 5-1/2" x 8-5/8" casing to pit. Squeeze perfs at 450' with 26 sx Class "C" cement, displacing cement with 9.5 ppg gel laden mud to 345' or above. WOC 4 hours. Release packer RIW with tubing and TAG cement plug @ or above 345' and notify Midland Office and BLM of the results.

28. POW laying down remainder of tubing. Set 4-1/2" AD-1 packer at 10'.

29. RUWL and 3000 psi lubricator. RIW with 1-11/16" strip gun and perforate 4 squeeze holes at 60'. RDWL.

30. **Plug #7** (13-3/8" shoe plug): Open 5-1/2" x 8-5/8" casing to pit. Squeeze perfs at 60' with 15 sx Class "C" cement, displacing cement with 9.5 ppg gel laden mud to surface.

31. Dig out wellheads and cut-off below "A" section.

32. Weld plate onto casing with marker joint with the following information:

SEE ATTACHED COA'S - NO PLATE- INFORMATION WELDED ONTO DHM

Fasken Oil & Ranch Ltd.,
Higgins Cahoon Com #1
Unit O, Section 2, T18S, R26E, 990' FSL and 1650' FEL.
VALVE NOT REQUIRED
Install ~~1"~~ 2000 ~~psi valve~~ welded into top of marker joint. Remove valve handle and close valve.

33. Send wellheads to Downing Wellhead in Midland. Clean location, RDPU and release all rental equipment.

CWB/NH
3-26-20
(AFE_4054_Higgins Cahoon Com1 P&A proc 3-26-20.doc)

Higgins Cahoon Com No. 1

as of 9-1-06

GL: 3291'

KB: 3307'

Operator: **Fasken Oil and Ranch, Ltd.**
Location: 990' FSL and 1650' FEL
Sec 2, T18S, R26E
Eddy County, NM
Compl.: 12/20/1974 released rig
API #: 30-015-21418
TD: 9072'
PBTD: 8920' by WL meas.

Casing: **13-3/8" 48# H-40 @ 1293'**
w/800 sx Howco Lite + 250sx "C"w/2% Cacl2
TOC surf, circ 150 sx
8-5/8" 24# J-55 @ 1904' KB
w/325sx "C"w/2% CaCl2
TOC 1075' by Temp Survey
5-1/2"17#J-55&15.5#K-55LT&C@ 9012'
w/500 sx "C" w/0.8% Halad-22, 5# kcl/sk
TOC 6500' by Temp

Tubing: Run 11-15-07

2-3/8" EUE 8rd perf sub w/ collar	3.86
2-3/8" EUE 8RD seating nipple	1.1
9-jts 2-3/8" EUE 8rd N-80 tubing	290.54
5-1/2 X 2 3/8 EUE 8RD Mod "B" TAC w/ 30,000# shear-at 8574'	2.8
272 jts 2-3/8" EUE 8rd N-80 tubing-	8559.16
	8857.46
Below KB	15
Total EOT-	8872.46

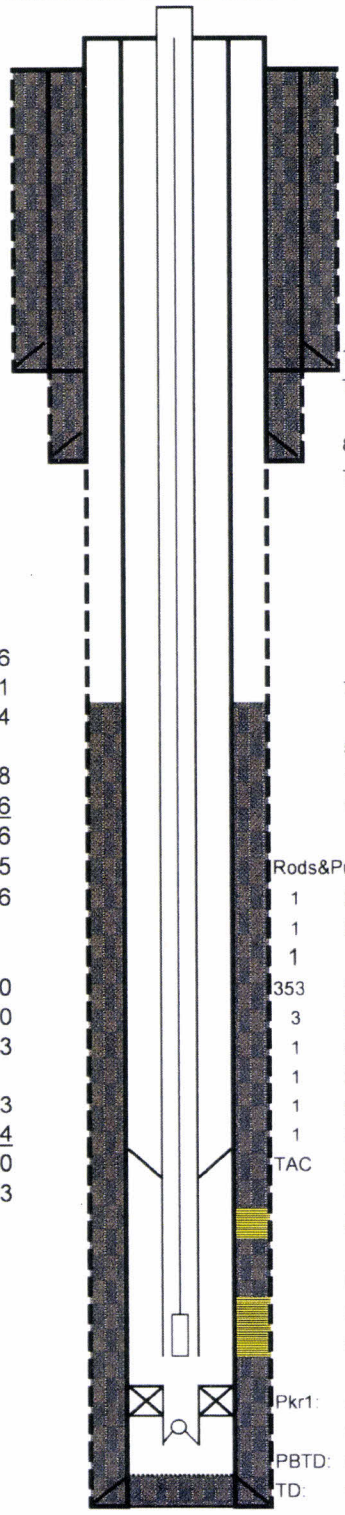
Rods&pmp: 2'x1-1/16" insert pmp, 3/4" Norris 97 steel rods

Pkr1:	7-28-06 milled & pushed top to	8897.00
	Otis 212WB5512 5-1/2" 3"bore	2.70
	2-7/8" EUE J-55 sub	7.63
	Profile Nipple 11N14 2-1/2" "N" LN w/2.255' No-Go ID	1.03
	Mule shoe coupling	0.44
	EOT	8908.80
	Run Standing Valve 10-20-81	8907.33

Perfs: Upper Morrow

10/21/1981	8635'-8654'	(2SPF w/4" Csg gun)
9/1/2006	8636'-8654'	(1jspf 1-11/16" Gamma gun)
	Morrow	
8/27/1980	8796'-8836'	(2 Hyperdome SPF w/2-1/8" thru tbg)
9/1/2006	8796'-8836'	(1jspf 1-11/16" Gamma gun)
1/28/1975	8817'-8836'	(10h, 0.33EHD, Hyper-Jet II)
1/28/1975	8796'-8816'	(11h, 0.33EHD, Hyper-Jet II)

Hole Sizes
17-1/2" 1293'
12-1/4" 1293'-1904'
7-7/8" 1904'-9072'



13-3/8" 48# H-40 @ 1293'
TOC surf, circ 150 sx

8-5/8" 24# J-55 @ 1904' KB
TOC 1075' by Temp Survey

TOC 6500' by Temp

5-1/2" Csg Wgt:
15.5#/ft Surf - 6327'
17#/ft 6327'-9012'

Rods&Pump:

1	26' X1-1/4"polishrod w/16' liner(26.00')
1	3/4" 2' Norris rod sub (2.00')
1	¾" X 6' Norris rod sub (6.00')
353	¾"x25'Norris78rdsw/fhsmcplgs(8825')
3	¾"x3'Norrissubw/3molded guides(3.00')
1	no-tap tool (1.1')
1	2"x1-1/16"x18'RHBCpmp
1	w/brass ni-carb barrel (16.00')
1	strainer nipple(0.5')
TAC	8574'

Upper Morrow
8635'-8654'

Morrow
8817'-8836'
8796'-8816'

Pkr1: Otis WB pkr 8897' w2-7/8"sub. "N" Stndg vlv
Standing valve at 8907'
PBTD: 8920' by WL meas.
TD: 9072'
5-1/2"17#J-55&15.5#K-55LT&C@ 9012'
TOC 6500' by Temp

dak
3/30/2020
Higgins Cahoon wb diagram.xls

Higgins Cahoon Com No. 1

Proposed P&A 3-25-20

GL: 3291', KB: 3307'

Operator: **Fasken Oil and Ranch, Ltd.**
Location: 990' FSL and 1650' FEL
Sec 2, T18S, R26E
Eddy County, NM
Compl.: 12/20/1974 released rig
API #: 30-015-21418
TD: 9072'
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w/800 sx Howco Lite + 250sx "C"w/2% Cacl2
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8-5/8" 24# J-55 @ 1904' KB
w/325sx "C"w/2% CaCl2
TOC 1075' by Temp Survey
5-1/2"17#J-55&15.5#K-55LT&C@ 9012'
w/500 sx "C" w/0.8% Halad-22, 5# kcl/sk
TOC 6500' by Temp

Tops

San Andres 1025'
Glorieta 2385'
Abo 4525'
Wolfcamp 5824'
Atoka 8530'
Morrow Clas. 8585'
Barnet Shale 8925'

Proposed P&A - 3-25-2020

15sx"C"	0'-60'	Plg #7 Surface
26sx"C"	345'-450', Tag	Plg #6, Perf & Sqz, TAG
45sx"C"	1159'-1343', Ta	Plg#5 Perf&Sqz,TAG
45sx"C"	1770'-1954', Ta	Plg #4, Perf & Sqz,TAG
45sx"C"	4516'-4700', Ta	Plg #3, tag
45sx"C"	5816'-6000', Ta	Plg #2, tag
25sx "H"	8360'-8585', Ta	Plg #1, Tag
CIBP:	8,585'	

Perfs: Upper Morrow

10/21/1981	8635'-8654'	(2SPF w/4" Csg gun)
9/1/2006	8636'-8654'	(1jspf 1-11/16" Gamma gun)
	Morrow	
8/27/1980	8796'-8836'	(2 Hyperdome SPF w/2-1/8" thru tbg)
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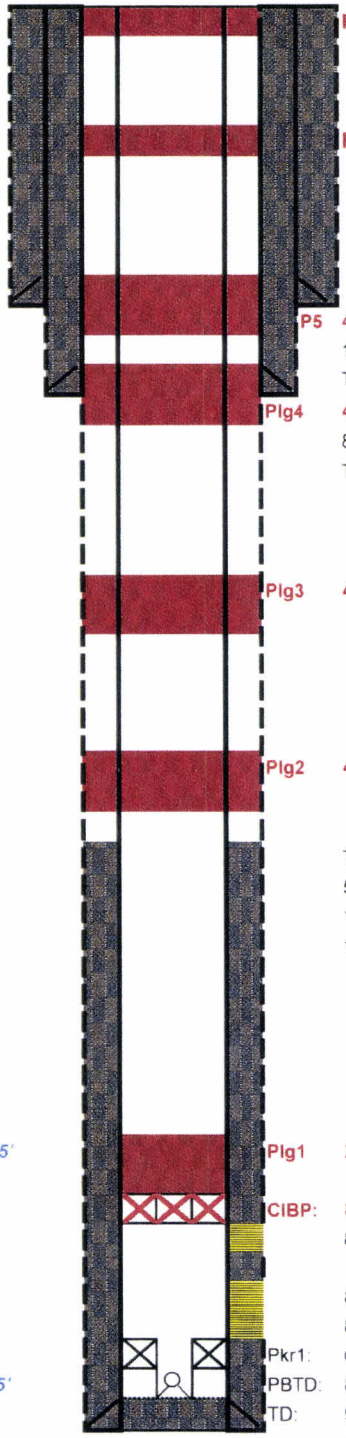
Hole Sizes
17-1/2" 1293'
12-1/4" 1293'-1904'
7-7/8" 1904'-9072'



Plg7 15 sx "C" 0'-60', Surface
Plg6, 26sx "C" 345'-450', Tag
Plg5 45sx "C" 1159'-1342', Tag
13-3/8" 48# H-40 @ 1293'
TOC surf, circ 150 sx
Plg4 45sx"C" 1770'-1954', Tag
8-5/8" 24# J-55 @ 1904' KB
TOC 1075' by Temp Survey
Plg3 45sx"C" 4516'-4700', Tag
Plg2 45sx"C" 5816'-6000', Tag
TOC 6500' by Temp
5-1/2" Csg Wgt:
15.5#/ft Surf - 6327'
17#/ft 6327'-9012'
Plg1 25sx "H" 8360'-8585', Tag
CIBP: 8,585'
8635'-8654'
8817'-8836'
8796'-8816'
Pkr1: Otis WB pkr 8897' w2-7/8"sub, "N" Stndg vlv
PBTD: 8920' by WL meas.
TD: 9072'
5-1/2"17#J-55&15.5#K-55LT&C@ 9012'
TOC 6500' by Temp

dak
3/30/2020
Higgins Cahoon wb diagram.xls

CONDITIONS FOR PLUGGING AND ABANDONMENT

OCD - Southern District

The following is a guide or checklist in preparation of a plugging program, this is not all inclusive and care must be exercised in establishing special plugging programs in unique and unusual cases, **Notify NMOCD District Office II at (575)-748-1283 at least 24 hours before beginning work. After MIRU rig will remain on well until it is plugged to surface. OCD is to be notified before rig down. Company representative will be on location during plugging procedures.**

1. A notice of intent to plug and abandon a wellbore is required to be approved before plugging operations are conducted. A cement evaluation tool is required in order to ensure isolation of producing formations, protection of water and correlative rights. A cement bond log or other accepted cement evaluation tool is to be provided to the division for evaluation if one has not been previously run or if the well did not have cement circulated to surface during the original casing cementing job or subsequent cementing jobs. Insure all bradenheads have been exposed, identified and valves are operational prior to rig up.
2. Closed loop system is to be used for entire plugging operation. Upon completion, contents of steel pits are to be hauled to a permitted disposal location.
3. Trucking companies being used to haul oilfield waste fluids to a disposal – commercial or private – shall have an approved NMOCD C-133 permit. A copy of this permit shall be available in each truck used to haul waste products. It is the responsibility of the operator as well as the contractor, to verify that this permit is in place prior to performing work. Drivers shall be able to produce a copy upon request of an NMOCD Field inspector.
4. Filing a subsequent C-103 will serve as notification that the well has been plugged.
5. A final C-103 shall be filed (and a site inspection by NMOCD Inspector to determine if the location is satisfactorily cleaned, all equipment, electric poles and trash has been removed to Meet NMOCD standards) before bonding can be released.
6. If work has not begun within 1 Year of the approval of this procedure, an extension request must be file stating the reason the well has not been plugged.
7. **Squeeze pressures are not to exceed 500 psi, unless approval is given by NMOCD.**
8. Produced water **will not** be used during any part of the plugging operation.
9. Mud laden fluids must be placed between all cement plugs mixed at 25 sacks per 100 bbls of water.
10. All cement plugs will be a minimum of 100' in length or a minimum of 25 sacks of cement, whichever is greater. 50' of calculated cement excess required for inside casing plugs and 100% calculated cement excess required on outside casing plugs.
11. **Class 'C' cement will be used above 7500 feet.**
12. **Class 'H' cement will be used below 7500 feet.**
13. **A cement plug is required to be set 50' above and 50' below, casing stubs, DV tools, attempted casing cut offs, cement tops outside casing, salt sections and anywhere the casing is perforated, these plugs require a 4 hour WOC and then will be tagged**
14. **All Casing Shoes Will Be Perforated 50' below shoe depth and Attempted to be Squeezed, cement needs to be 50' above and 50' Below Casing Shoe inside the Production Casing.**

16. When setting the top out cement plug in production, intermediate and surface casing, wellbores should remain full at least 30 minutes after plugs are set
17. **A CIBP is to be set within 100' of production perforations, capped with 100' of cement, WOC 4 hours and tag.**
18. A CIBP with 35' of cement may be used in lieu of the 100' plug if set with a bailer. This plug will be placed within 100' of the top perforation, **(WOC 4 hrs and tag).**
19. No more than **3000' is allowed between cement plugs in cased hole and 2000' in open hole.**
20. Some of the Formations to be isolated with cement plugs are: These plugs to be set to isolate formation tops
    A) Fusselman
    B) Devonian
    C) Morrow
    D) Wolfcamp
    E)Bone Springs
    F) Delaware
    G) Any salt sections
    H) Abo
    I) Glorieta
    J) Yates.
    K) **Potash---** (In the R-111-P Area (Potash Mine Area), a solid cement plug must be set across the salt section. Fluid used to mix the cement shall be saturated with the salts that are common to the section penetrated and in suitable proportions, not more than 3% calcium chloride (by weight of cement) will be considered the desired mixture whenever possible, **WOC 4 hours and tag, this plug will be 50' below the bottom and 50' above the top of the Formation.**
21. **If cement does not exist behind casing strings at recommended formation depths,** the casing can be cut and pulled with plugs set at recommended depths. If casing is not pulled, perforations will be shot and cement squeezed behind casing, WOC and tagged. These plugs will be set 50' below formation bottom to 50' above formation top inside the casing

DRY HOLE MARKER REQUIRMENTS

The operator shall mark the exact location of the plugged and abandoned well with a steel marker not less than four inches in diameter, 3' below ground level with a plate of at least ¼" welded to the top of the casing and the dry hole marker welded on the plate with the following information welded on the dry hole marker:

1. Operator name 2. Lease and Well Number 3.API Number 4. Unit Letter 5. Quarter Section (feet from the North, South, East or West) 6. Section, Township and Range 7. Plugging Date 8. County (SPECIAL CASES)-------AGRICULTURE OR PRARIE CHICKEN BREEDING AREAS

In these areas, a below ground marker is required with all pertinent information mentioned above on a plate, set 3' below ground level, a picture of the plate will be supplied to NMOCD for record, the exact location of the marker (longitude and latitude by GPS) will be provided to NMOCD (We typically require a current survey to verify the GPS)

SITE REMEDIATION DUE WITHIN ONE YEAR OF WELL PLUGGING COMPLETION