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

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NMOCD ARTESIA

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

Form C-101
Revised July 18, 2013

☐ AMENDED REPORT

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

1. Operator Name and Address	2. OGRID Number
Ray Westall Operating, Inc. P.O. Box 4, Loco Hills, NM 88255	119305
	3. API Number 30-015-32422

4. Property Code	5. Property Name	6. Well No.
~~TBD~~ 40492	State 25 SWD	1

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
F	25	18 S	27 E		2310'	North	1980'	West	Eddy

8. Proposed Bottom Hole Location

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

9. Pool Information

Pool Name	Pool Code
SWD; Wolfcamp - Penn - Miss - Dev SWD; Wolfcamp / SWD; Gisco / SWD; Strawn 96135 / 96099 / 96188	96137 96136

Additional Well Information

11. Work Type	12. Well Type	13. Cable/Rotary	14. Lease Type	15. Ground Level Elevation
E	S	R	S	3559'
16. Multiple	**17. Proposed Depth**	**18. Formation**	**19. Contractor**	**20. Spud Date**
N	9324' PBTD	Strawn	TBD	4/15/2014
Depth to Ground water	**Distance from nearest fresh water well**		**Distance to nearest surface water**	
~180'	~4000'		n/a	

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

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surface	17.5"	13.375"	48.0#	310'	335 'C'	Circ. to Surf.
Intermediate	12.5"	9.625"	26.0#	2380'	803 'C'	Circ. to Surf.
Production	8.75"	7.0"	20/23/26#	7334'	1250 'C'	Circ. to Surf.

Casing/Cement Program: Additional Comments

Optional 2 stage 7" thru DV tool will be determined by completion specialist.

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Hydraulic or Man./Dbl. Blind Ram	3000 psi	5000 psi	Shaffer/Hydril or equivalent

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

Printed name: Ben Stone
Title: Agent for Ray Westall Operating, Inc.
E-mail Address: ben@sosconsulting.us
Date: 4/04/2014 Phone: 903-488-9850

OIL CONSERVATION DIVISION

Approved By: T. C. Shepard
Title: "Geologist"
Approved Date: 4-8-2014 Expiration Date: 4-8-2016
Conditions of Approval Attached

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number	2 Pool Code	3 Pool Name
30-015-32422	~~96137~~	~~SWD; Wolfcamp - Penn~~ Miss-Dev ~~SWD; Wolfcamp/Cisco/Strawn~~

4 Property Code	5 Property Name	6 Well Number
~~TBD~~ 40492	State 25 SWD	1

7 OGRID No.	8 Operator Name	9 Elevation
119305	Ray Westall Operating, Inc.	3559 feet

10 Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	25	18-S	27-E		2310	North	1980	West	Eddy

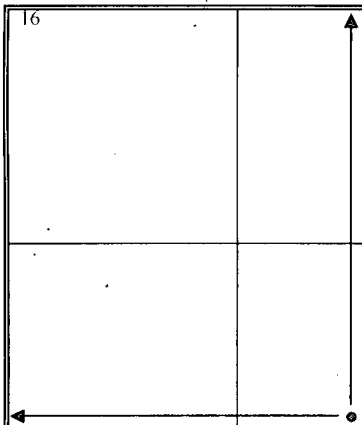
11 Bottom Hole Location If Different From Surface

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

12 Dedicated Acres	13 Joint or Infill	14 Consolidation Code	15 Order No.
n/a	n/a	n/a	SWD-1461

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

16



17 OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature — 4/04/2014 Date

Benjamin E. Stone
Printed Name

SOS Consulting, LLC agent for:
Ray Westall Operating, Inc.

18 SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

July 15, 2002
Date of Survey

Signature and Seal of Professional Surveyor:

Gary L. Jones

Cert. No.2618
Certificate Number

Ray Westall Operating, Inc.
State 25 Well No.1 SWD
Section 25, Twp 18-S, Rng 27-E
Eddy County, New Mexico

Well Re-entry Program

Objective: Re-enter the existing wellbore by drilling out all plugs, clean out to TD, run 7.0" casing, acidize and run new tubulars to configure for salt water disposal.

1. **Geologic Information** - (Roy E. Johnson, Consulting Geologist) - The Wolfcamp is a light gray-brown fine to medium crystalline fossiliferous limestone with inter-crystalline vugular porosity interbedded with gray shale. Additional porosity can be found when the well bore encounters detrital carbonates which were shed off shelf and foreslope areas and transported down the Wolfcamp paleoslope.

The Cisco/Canyon Formation (Upper Penn) similar to the Wolfcamp is a gray micritic (fine grained) fossiliferous limestone with vugular porosity. The reservoirs in this area are usually limited in size with up dip porosity loss due to shelf margin carbonate build up.

The Strawn consists of similarly medium-grained carbonates, primarily dolomite and porous and permeable sandstone. Porosity values in the carbonates are generally quite low, averaging from 2 to 9%; however, associated permeability can be quite high and may lend to acceptable disposal rates when combined with the other formations.

Formation Tops (Some Data Inferred from Offsets):

Caliche/Red Beds	Btm.272
Yates	690
Seven River	1000
Queen	1364
San Andres	2117
Bone Spring	5826
Wolfcamp	7334
Cisco / Canyon	8250
Strawn	8850
Atoka	9990
Mississippian	10532

2. **Completion Procedure**

a. MIRU pulling unit, reverse unit and associated equipment. Install BOP. RIH with bit and collars to drillout plugs – Drill through plugs at 660'; 2430'; 4000'; 5900'; 7500' – Continue to ~9400' – should be clear.
b. Spot 50 sx cement plug from 9425' to 9324'.
c. Run 7.0" casing to 7334' and cement.
d. D/O and circulate hole clean.
e. Acidize if necessary.
f. Configure for SWD-1461; Run tublars, conduct MIT, commence disposal/injection.

Well Re-entry Program (cont.)

3. **Tubular program** - The well casing is set except as described above. (See attached Proposed Well Schematic) 4-1/2" internally coated tubing will be run and set in a packer located at approximately 7250' (within 100' of the uppermost injection at casing shoe depth).

4. **Cementing Program** - Existing Surface and Intermediate casing strings were all circulated to surface during the original well drilling and completion operations as follows:

Surface	13.375"	48.0#	17.5" hole	310'	335 sx	Circ to Surf
Intermediate	9.625"	26.0#	12.25" hole	2380'	803 sx	Circ to Surf
New 7.0" Production be set as follows:						
Production	7.0"	20.0/23.0/26.0#	8.75" hole	7334'	900 sx	Circ to Surf

5. **Pressure Control** - BOP diagram is attached to this application. All BOP and related equipment shall comply with well control requirements as described NMOCD rules and regulations. Minimum working pressure of the BOP and related equipment required for the drillout shall be 3000 psi. OCD will be notified a minimum of 4 hours prior to BOP pressure tests. The test shall be performed by an independent service company utilizing a test plug (no cup or J-packer). The results of the test shall be recorded on a calibrated test chart submitted to the OCD Artesia district office. The BOP test(s) will be conducted at:

a) Installation;
b) after equipment or configuration changes;
c) at 30 days from any previous test, and;
d) anytime operations warrant, such as well conditions

6. **Mud Circulation System** - the plugs will be drilled with 8.4 lb/gal fresh water looped through the reverse unit with all cutting recovered for disposal. Visual inspection will be made by personnel while reverse unit is in operation so cement plug cuttings and potential losses are witnessed and acted upon.

7. **Auxiliary Well Control and Monitoring** - Not Applicable

8. **H_2S Safety** - There is a low risk of H2S in this area. The operator will comply with the provisions of Onshore Oil and Gas Order #6. All personnel will wear monitoring devices and a wind direction sock will be placed on location.

9. **Logging, Coring and Testing** - Ray Westall Operating is not anticipating running additional logs. No corings or drill tests will be conducted. (The well may potentially be step rate tested in the future if additional injection pressures are required.)

10. **Potential Hazards** - No abnormal pressures or temperatures are expected. No loss of circulation is expected to occur. All personnel will be familiar with the safe operation of the equipment being used to drillout and reenter this well. The maximum anticipated bottom hole pressure is 4200 psi and the maximum anticipated bottom hole temperature is 130 F.

11. **Waste Management** - All drill cuttings and other wastes associated with the re-entry and drill out operations will be transported to a commercial surface waste disposal facility permitted by the Environmental Bureau of the New Mexico Oil Conservation Division.

Well Re-entry Program (cont.)

12. **Anticipated Start Date** - Upon approval of all permits for SWD, operations would begin within 30 days. Completion of the well operations will take two to three weeks. Installation of the tank battery, berms, plumbing and other and associated equipment would be occurring during the same interval. In any event, it is not expected for the construction phase of the project to last more than 60 days, depending on availability of contractors and equipment. At the time of this submittal, the anticipated start date is:

April 15, 2014.

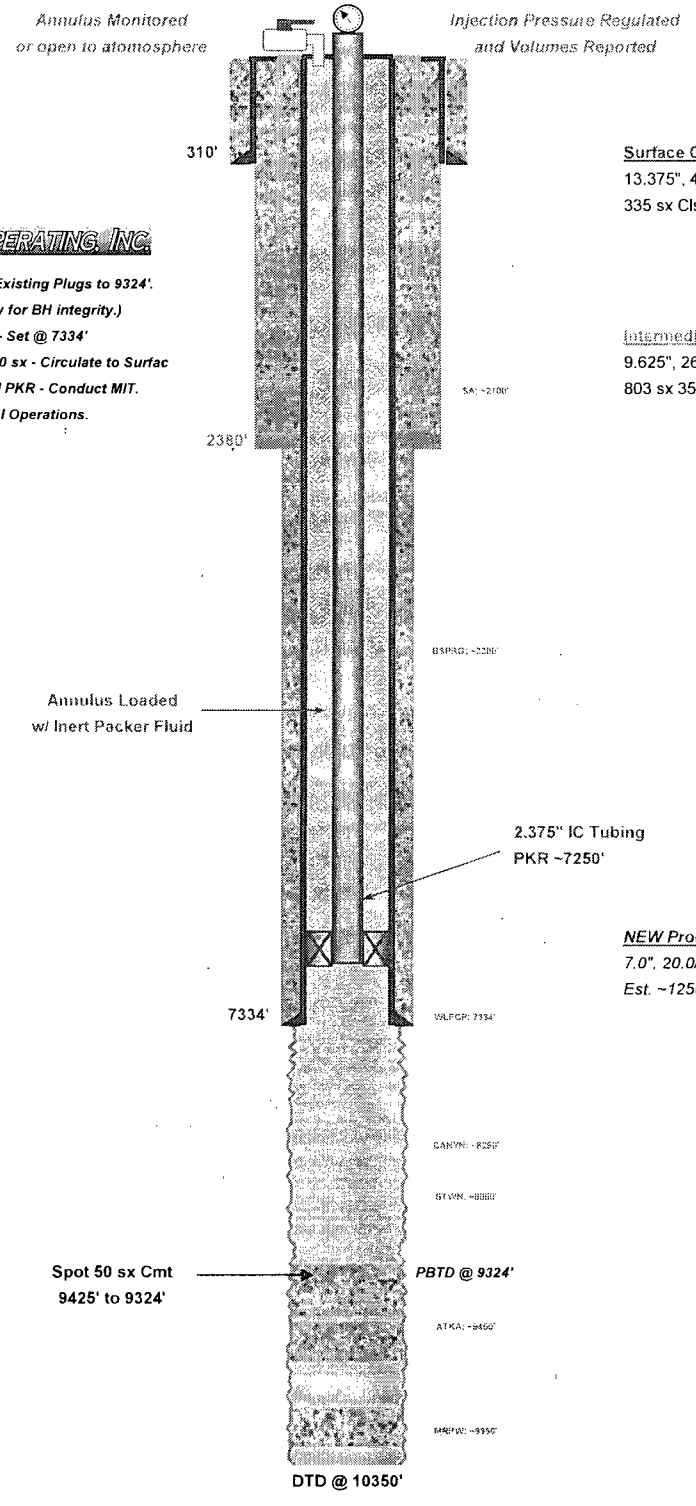
13. **Configure for Salt Water Disposal** – SWD Permit No. SWD-1461. Prior to commencing any work, an NOI sundry(ies) will be submitted to configure the well for SWD and will detail the following tasks: drillout and workover including all work otherwise described above, any change to the procedure noted herein and to perform mechanical integrity pressure test per OCD test procedures. (Notify NMOCD 24 hours prior.) The casing/tubing annulus will be monitored for communication with injection fluid or loss of casing integrity. Anticipated daily volume is ~10,000 bpd at a maximum surface injection pressure of 1467 psi.

WELL SCHEMATIC - PROPOSED
State 25 Well No.1 SWD

API 30-015-32422

2310' FNL & 1980' FWL, SEC. 25-T18S-R27E
EDDY COUNTY, NEW MEXICO

Spud Date: 9/24/2002
Re-Entry Date: ~4/15/2014



RAY WESTALL OPERATING, INC.

Convert to SWD: D/O & C/O Existing Plugs to 9324'.
(Spot cement if necessary for BH integrity.)
Run & Set New 7.0" - Set @ 7334'
ment (2 stage optional) w/ ~1250 sx - Circulate to Surfac
Acdize; Run PC Tubing and PKR - Conduct MIT.
Commence Disposal Operations.

Surface Casing
13.375", 48.0# Csg. (17.5" Hole) @ 310'
335 sx Cls 'C' - 100 sx - Circulated to Surface

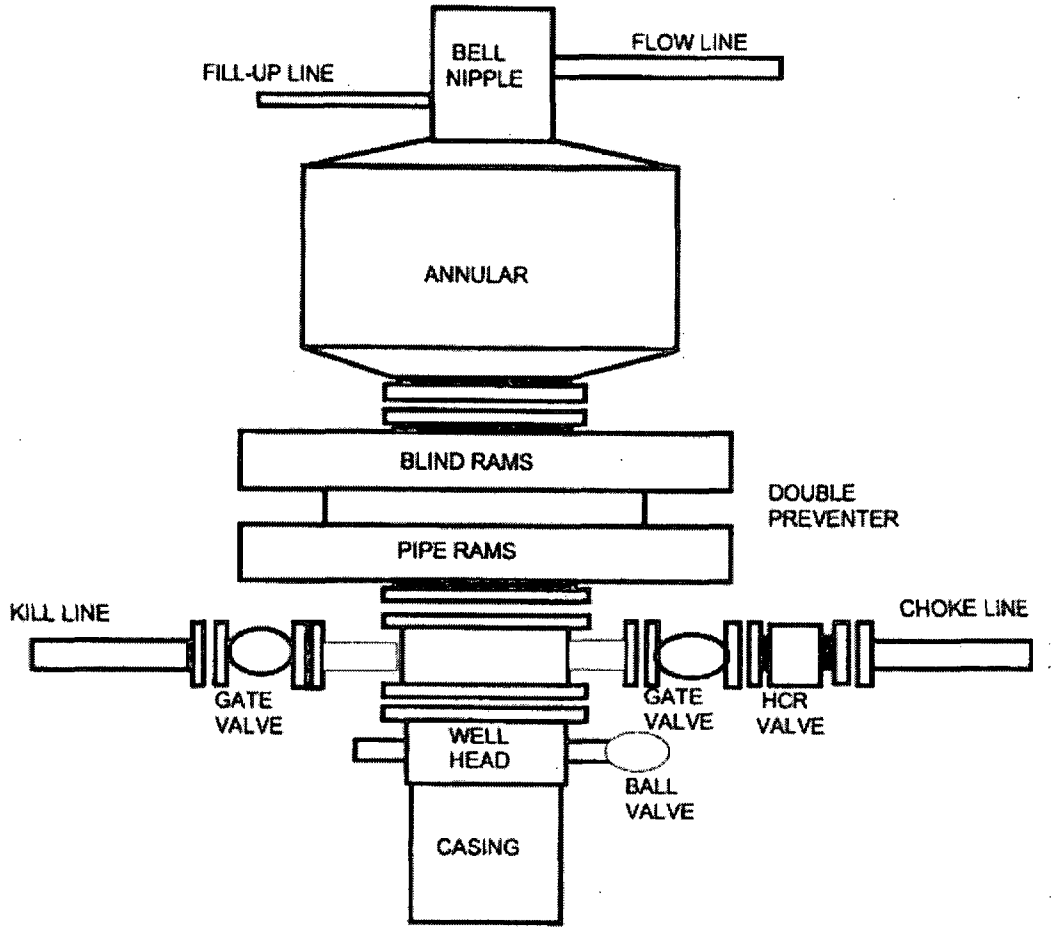
Intermediate Casing
9.625", 26.0# csg. (12.25" Hole) @ 2380'
803 sx 35/65 Poz + 'C' - 68 sx Circulated to Surface

NEW Production Casing
7.0", 20.0/23.0/26.0# Csg - Surface to 7334'
Est. ~1250 sx w/ excess - Circulate to Surface

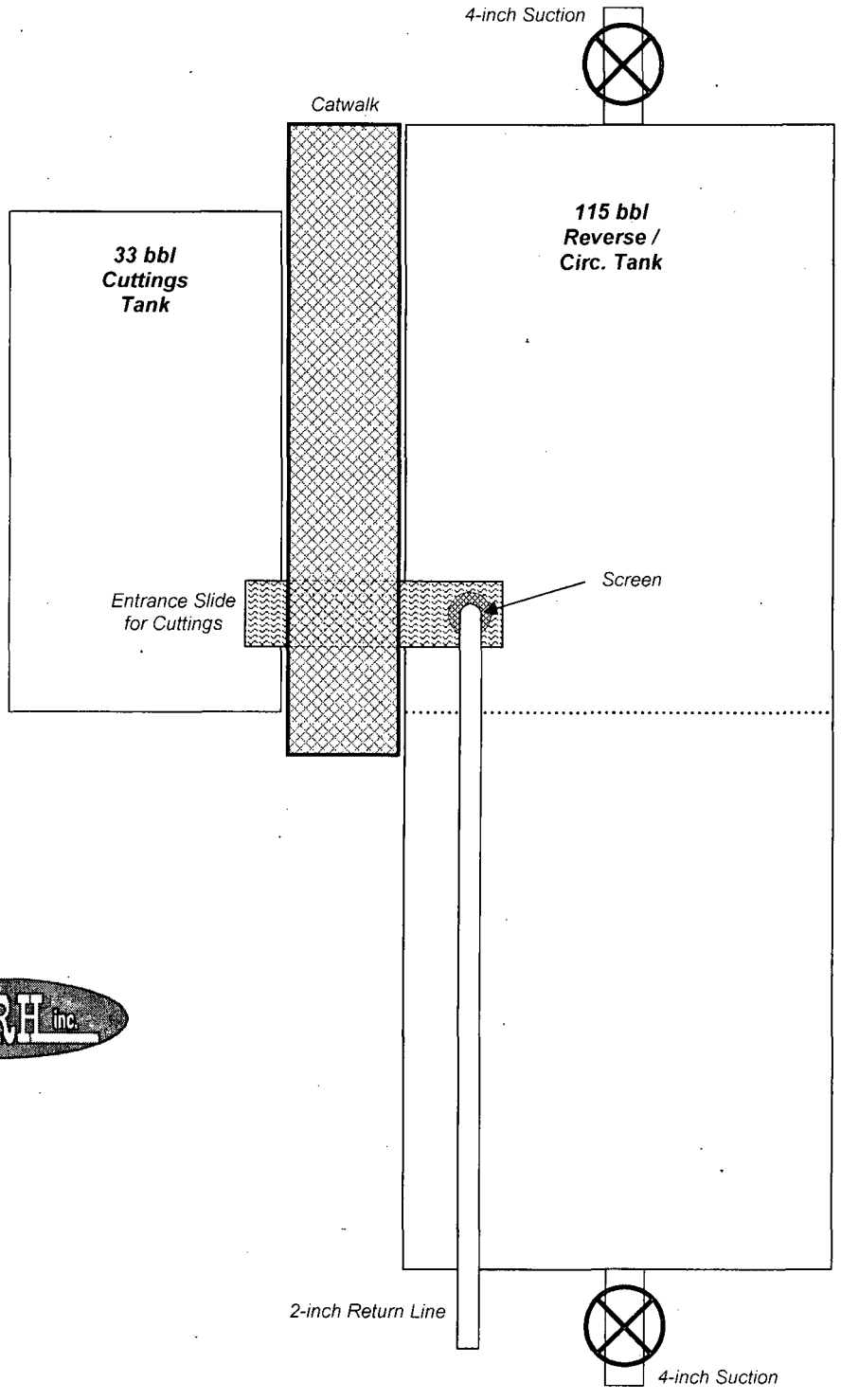
SOS Consulting, LLC
Drawn by: Ben Stone, Revised 4/07/2014

BLOWOUT PREVENTER DIAGRAM

3000 PSI WORKING PRESSURE



Reverse / Circulation Tank for Workovers & Drillouts



Standard Operating Procedure - Re-entry
Closed-Loop Reverse Unit Diagram

1. Blow Out Preventer tested prior to any operations. Notify OCD at least 4 hours prior.

2. Visual monitoring maintained on returns. Proceed with drillout operations accordingly.

3. Cuttings / waste hauled to specified facility. CRI - LEA COUNTY

4. Spills contained & cleaned up immediately. Repair or otherwise correct the situation within 48 hours before resuming operations. Notify OCD within 24 hours. Remediation started ASAP if required. Operator shall comply with 19.15.29 NMAC and 19.15.30 NMAC, as appropriate.

5. Subsequent sundry / forms filed as needed - well returned to service.