

**District I**  
1625 N. French Dr., Hobbs, NM 88240  
Phone: (575) 393-6161 Fax: (575) 393-0720

**District II**  
811 S. First St., Artesia, NM 88210  
Phone: (575) 748-1283 Fax: (575) 748-9720

**District III**  
1000 Rio Brazos Road, Aztec, NM 87410  
Phone: (505) 334-6178 Fax: (505) 334-6170

**District IV**  
1220 S. St. Francis Dr., Santa Fe, NM 87505  
Phone: (505) 476-3460 Fax: (505) 476-3462

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

Form C-101  
Revised July 18, 2013

☐ AMENDED REPORT

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

<sup>1</sup> Operator Name and Address <b>Ray Westall Operating, Inc.</b> <b>P.O. Box 4, Loco Hills, NM 88255</b>		<sup>2</sup> OGRID Number <b>119305</b>
		<sup>3</sup> API Number <b>30-015-21971</b>
<sup>4</sup> Property Code <b>TBD</b>	<sup>5</sup> Property Name <b>DHY State B SWD</b>	<sup>6</sup> Well No. <b>1</b>

#### 7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
<b>L</b>	<b>11</b>	<b>19 S</b>	<b>28 E</b>		<b>1980'</b>	<b>South</b>	<b>990'</b>	<b>West</b>	<b>Eddy</b>

#### 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
<b>SWD; Cisco-Canyon</b>	<b>96186</b>

#### Additional Well Information

<sup>11</sup> Work Type <b>E</b>	<sup>12</sup> Well Type <b>S</b>	<sup>13</sup> Cable/Rotary <b>R</b>	<sup>14</sup> Lease Type <b>S</b>	<sup>15</sup> Ground Level Elevation <b>3477'</b>
<sup>16</sup> Multiple <b>N</b>	<sup>17</sup> Proposed Depth <b>10000' PBTD</b>	<sup>18</sup> Formation <b>Cisco - Canyon</b>	<sup>19</sup> Contractor <b>TBD</b>	<sup>20</sup> Spud Date <b>9/15/2021</b>
Depth to Ground water <b>~143'</b>		Distance from nearest fresh water well <b>~ 0.75 miles</b>		Distance to nearest surface water <b>n/a</b>

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

#### 21. Proposed Casing and Cement Program

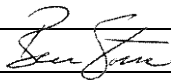
Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
<b>Surface</b>	<b>7.5"</b>	<b>13.375"</b>	<b>48.0#</b>	<b>415'</b>	<b>400 'C'</b>	<b>Circ. to Surf.</b>
<b>Intermediate</b>	<b>11.0"</b>	<b>8.625"</b>	<b>24.0/28.0#</b>	<b>2800'</b>	<b>1121 'C'</b>	<b>Circ. to Surf.</b>
<b>Production *</b>	<b>7.875"</b>	<b>5.5"</b>	<b>17.0/20.0#</b>	<b>13349' / PBTD 10000'</b>	<b>700 'H'</b>	<b>Calc to Circ.</b>

#### Casing/Cement Program: Additional Comments

\*Drill out plugs to apprx. 10,050' (Set CIBP @ 10,030' w/ 30' cement cap.)

#### 22. Proposed Blowout Prevention Program

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

<sup>23</sup> I hereby certify that the information given above is true and complete to the best of my knowledge and belief. <b>I further certify that I have complied with 19.15.14.9 (A) NMAC <input type="checkbox"/> and/or 19.15.14.9 (B) NMAC <input type="checkbox"/>, if applicable.</b> Signature:  Printed name: <b>Ben Stone</b> Title: <b>Agent for Ray Westall Operating, Inc.</b> E-mail Address: <b>ben@sosconsulting.us</b> Date: <b>8/20/2021</b> Phone: <b>903-488-9850</b>	<b>OIL CONSERVATION DIVISION</b>	
	Approved By:	
	Title:	
	Approved Date:	Expiration Date:
	Conditions of Approval Attached	

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

Form C-102  
Revised August 1, 2011  
Submit one copy to appropriate  
District Office  
☒ AMENDED REPORT

## WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 30-015-21971	<sup>2</sup> Pool Code 96186	<sup>3</sup> Pool Name SWD; Cisco-Canyon
<sup>4</sup> Property Code TBD	<sup>5</sup> Property Name DHY State B	<sup>6</sup> Well Number 1
<sup>7</sup> OGRID No. 119305	<sup>8</sup> Operator Name Ray Westall Operating, Inc.	<sup>9</sup> Elevation 3477'

<sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	11	19S	28E		1980'	FSL	990'	FWL	Eddy

<sup>11</sup> 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
same									
<sup>12</sup> Dedicated Acres n/a	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No. SWD pending						

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.

<sup>16</sup> 				<sup>17</sup> <b>OPERATOR CERTIFICATION</b> <i>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.</i>  Signature <span style="float: right;">8/09/2021 Date</span> Ben Stone Printed Name ben@sosconsulting.us E-mail Address
<sup>18</sup> <b>SURVEYOR CERTIFICATION</b> <i>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</i> November 9, 1976 Date of Survey Signature and Seal of Professional Surveyor: Herschel L. Jones 3640 Certificate Number				



## WELL SCHEMATIC - PROPOSED

## DHY State 'B' Well No.1 SWD

API 30-015-21971

1980' FSL & 990' FWL, SEC. 11-T19S-R28E  
EDDY COUNTY, NEW MEXICO

P&amp;A Date: 3/22/2007

SWD Config Date: ~10/15/2021

**RAY WESTALL OPERATING, INC.**

Convert to SWD: D/O &amp; C/O Existing Plugs to 10050'.

Test Existing Perfs Going Down - SQZ if Rqr'd.

Set CIBP @ 10030' w/ 30' Cement Cap.

Perforate Selected Interval Between 9600'-9950'.

Acidize w/ Max. 5000 gals. 15% HCl - Flowback/Swab.

Run Internally Coated Tubing w/ PKR set ~9500'.

Perform OCD Witnessed MIT (24 hr. notice).

Commence Disposal Operations.

Annulus Monitored  
or open to atmosphereInjection Pressure Regulated  
and Volumes Reported  
1920 psi

415'

**Surface Casing**13.375" 48.0# Csg. (17.5" Hole) @ 415'  
400 sx - Circulated to Surface1987 Casing Repair  
Casing Parted 1660'  
B/O Csg @ 1975'  
Run New 5.5" & Circ w/ Cmt.  
Shoot Sqz Perfs @ 3105'  
sqz w/ 500 sx + 100 sx  
Run 1" job w/ 100 sx

SA: 2500'

2800'

**Intermediate Casing**8.625" 24.0/28.0# Csg. (11.0" Hole) @ 2800'  
1121 sx - TOC @ 541' by TempAnnulus Loaded  
w/ Inert Packer Fluid

TOC 8100'

BSPRG: 4303'

WLFPC: 8815'

Existing Perfs: 8870'-8942' (SQZ if Rqr'd.)

PENN: 8988'

3.5" or 2.875" IC Tubing  
PKR ~9500'

CSCO: 9630'

CNYN: 9775'

Perf Interval: 9600' to 9950'

Set CIBP @ ~10030'  
Cap w/ 30' Cmt.Existing CIBP @ 10400'  
w/ 20' Cmt. Cap

Formation Fluids

PBTD @ 10000'

STWN: 10020'

ATKA: 10295'

Perfs: 10458'-66'

MRRW: 10740'

**Production Casing**5.5" 17.0/20.0# Csg (7.875" Hole) @ 11349'  
700 sx Cls H - TOC @ 8100' by Temp

11349'

DTD @ 11350'



Drawn by: Ben Stone, Rvs'd 9/17/2021

## CURRENT CONFIGURATION

PLUGGED WELL SCHEMATIC  
DHY State 'B' Well No.1Well Plugged by:  
Mayo Marrs, Inc.

(See Well Notes Below)

API 30-015-21971

1980' FSL & 990' FWL, SEC. 11-T19S-R28E  
EDDY COUNTY, NEW MEXICO

Spud Date: 2/07/1977

P&amp;A Date: 3/22/2007

&lt;PLUGGING ITEMS LISTED LEFT&gt;

## PLUGS:

Perf @ 60'  
Circ & Fill to Surf.

Spot 25 sx 1108' 415'

Perf 485' SQZ / Circ.

(Tag @ 217')

Spot 35 sx Cmt

1780'-1521'

(Tagged)

Spot 25 sx Cmt

4350'-4114'

(Tagged)

Spot 25 sx Cmt

4350'-4114'

(Tagged)

Spot 25 sx Cmt

6174'-5922'

(Tagged)

Spot 25 sx Cmt

7134'-6948'

(Tagged)

Circulate Hole w/  
Plugging Mud

Spot 25 sx Cmt

8788'-8526'

(Tagged)

CIBP Proposed at 8870'

May or May NOT Exist.

## Well Notes: Well file records sketchy.

Unable to confirm events leading up to Forced Plugging. Operator unresponsive during last 2 years of operations. Verified CIBP at 10400' w/ 20' cmt cap - proposed CIBP at 8870' could NOT be verified by any well file sundry notice. P&A diagram in wellfile is a "proposed" diagram from the operator. **That diagram does not reflect the P&A performed by Mayo and Marrs, Inc.** Mayo Marrs P&A sundry does not mention tagging TD so it is not known why the bottom plug was set at 8788'. This may be circumstantial evidence that the CIBP @ 8870' was possibly set and not properly documented.

Ray Westall Operating, Inc. reentry operations will take unknowns into account and drillout & cleanout as necessary to establish solid PBDT ~10000' for SWD completion.

CIBP @ 10400 w/ 20' Cmt Cap

Formation Fluids

11349'

DTD @ 11350'

P&amp;A Marker

G.R. 3477'

&lt;PRE-P&amp;A EXISTING ITEMS LISTED RIGHT&gt;

## Surface Casing

13.375" 48.0# Csg. (17.5" Hole) @ 415'

425 sx - Circulated 65 sx to Surface

1987 Casing Repair  
Casing Parted 1660'  
B/O Csg @ 1975'  
Ran New 5.5" & Circ w/ Cmt.  
Shoot Sqz Perfs @ 3105'  
sqz w/ 500 sx + 100 sx  
Ran 1" job w/ 100 sx

## Intermediate Casing

8.625" 32.0# Csg. (11.0" Hole) @ 2800'

1300 sx - Circulated 35 sx to Surface

&lt;P&amp;A SUBSEQUENT SUNDRY&gt;

03/16/2009 MON 10:53 FAX 4325882453 MAYO CASING

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

WELL API NO.  
30-015-21971

5. Indicate Type of Lease  
STATE ☒ FEE ☐  
6. State Oil & Gas Lease No.  
648

7. Lease Name or Unit Agreement Name  
DHY STATE B

8. Well Number  
001

9. OGRID Number  
10882

10. Pool name or  
MILLMAN/WOLF CAMP (GAS)

11. Elevation (Show whether DR, RKB, RT, CR, etc.)  
NMPM County EDDY, NM

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

NOTICE OF INTENTION TO:  
PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐ REMEDIAL WORK ☐ ALTERING CASING ☐  
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐ COMMENCE DRILLING OPERATIONS ☐ P & A ☒  
PULL OR ALTER CASING ☐ MULTIPLE COMPL. ☐ CASING/CEMENT JOB ☐

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 1103. For Multiple Completion. Attach wellbore diagram of proposed completion or recompletion.

SEE ATTACHMENT

TOC 8100'

WLFPC: 8750'

Perfs: 8870'-8942'

PENN: 9540'

CANYN: 9773'

STWN: 9910'

ATKA: 10295'

Perfs: 10458'-66"

MRRW: 10740'

## Production Casing

5.5" 17.0/20.0# Csg (7.875" Hole) @ 11349'

700 sxs Cls H - TOC @ 8100' by Temp

\*Top 1975' replaced 10/87 w/ 600 sx

Followed w/ 1" job of 100 sx circ. to surf.



Drawn by: Ben Stone, Rvsd 9/17/2021

**Ray Westall Operating, Inc.  
DHY B State SWD #1  
API No. 30-015-21971  
1980' FSL & 990' FWL  
Sec. 11, Twp 19S, Rng 28 E  
Eddy County, New Mexico**

### **Well Re-entry Program**

**Objective: Re-enter the existing wellbore by drilling out plugs, squeeze old perfs, circulate clean, set CIBP w/ cement cap to new PBTD of 10000', perforate, acidize and run new tubulars to configure for salt water disposal.**

**1. Geologic Information** - The Cisco Formation (Upper Penn) 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 [Pennsylvanian] Canyon formation consists of similarly medium-grained carbonates, primarily dolomite and porous and permeable sandstone interbedded with shale and is generally 150 to 200 feet in thickness.

The combined zones offer good porosity in the proposed injection interval located from 9600 feet to 9950 feet with some very good porosity interspersed throughout the overall interval.

The Cisco is overlain by the Wolfcamp and the Canyon is underlain by the Strawn and Atoka.

Fresh water in the area is generally available from the Santa Rosa formation (Capitan Basin). Based on State Engineer's records for a water well in Section 11, Twp 19S, Rng 28E, groundwater is at a depth to water of 265 feet.

### **Formation Tops**

San Andres	2500
Bone Spring	4303
Wolfcamp	8815
Penn	8988
Canyon	9540
Strawn	10020
Atoka	10297

### **2. Reentry Prep and Procedure**

- a) Excavate around the cutoff casing at the surface and constructing cellar.
- b) Expose surface casing or conductor by cutting back exterior casing stubs and removing cement between them, as required.
- c) Extend the surface casing to the surface or to the platform wellhead deck.
- d) Install new wellhead with the as sized (grade/ weight) and bradenhead valves.
- e) Test wellhead and casing extension with pressure sufficient to assure that the reconstructed well segment can contain expected surface pressures.
- f) Nipple up and test BOP.

**Well Re-entry Program (cont.)****3. Completion Procedure**

- a) MIRU WСУ, reverse unit and associated equipment. **(Refer to NGMP info.)**
- b) Install B.O.P. RIH with bit and collars to drill out plugs.
- c) D/O & C/O plugs to appr. 10,030'. Spot 30 ft cmt on CIBP to 1000' PBTD.
- d) Squeeze existing permt 8870' to 8942' as needed.
- e) Perf interval at selected porosity between 9600' to 9950'.
- f) Acidize w/ ~2500 gals HCl per 1000'. Swab and/or circulate hole clean.
- g) RIH with nickel plated 5.5" or equiv. VFE retrievable packer or equivalent on 2.875" or 3.5" IPC or equiv. tubing w/ PKR @ 9500'+, pump clean fresh water containing corrosion inhibitor, biocide and oxygen scavenger down annulus, set packer. Prepare to run MIT test and notify OCD to witness 24 hours in advance.
- h) Build injection facility and start water disposal. Per SWD-1582; limit injection pressure to 1920 psi.

**3. Tubular program** - The well casing is set as described above. (See attached Proposed Well Schematic) 2-7/8" (3.5" optionally) internally coated tubing will be run and set in a packer located at approximately 9500' (within 100' of the uppermost injection perfs).

**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	415'	400 sx 'C'	Circ to Surf
Intermediate	8.625"	24.0/28.0#	11.0" hole	2800'	1121 sx 'C'	Circ to Surf
Production	5.5"	17.0/20.0#	7.875" hole	11349'	700 sx 'H'	Calc. to Circ.
<b>Set CIBP @ 10030' - Spot 30 ft cement for estimated 10000' PBTD</b>						

**5. Pressure Control** - BOP diagram is attached to this application. All BOP and related equipment shall comply with well control requirements as described NMOC 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<sub>2</sub>S Safety** - There is a low risk of H<sub>2</sub>S in this area. The operator will comply with the provisions of company H<sub>2</sub>S contingency plan as applicable. All personnel will wear monitoring devices and a wind direction sock will be placed on location.

**Well Re-entry Program (cont.)**

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 4500 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.

12. **Anticipated Start Date** – Ready now – MIRU 8/22/2021. 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 30 days, depending on availability of contractors and equipment. At the time of this submittal, the anticipated start date is:

**August 23, 2021.**

13. **Configure for Salt Water Disposal** – SWD Permit No. SWD-1582 (*extended expiration date September 23, 2022*). 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 ~5,000 bpd at a maximum surface injection pressure of 1920 psi.



**Ray Westall Operating, Inc.  
DHY B State SWD #1  
API No. 30-015-21971  
1980' FSL & 990' FWL  
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- b) Expose surface casing or conductor by cutting back exterior casing stubs and removing cement between them, as required.
- c) Extend the surface casing to the surface or to the platform wellhead deck.
- d) Install new wellhead with the as sized (grade/ weight) and bradenhead valves.
- e) Test wellhead and casing extension with pressure sufficient to assure that the reconstructed well segment can contain expected surface pressures.
- f) Nipple up and test BOP.



**Well Re-entry Program (cont.)****3. Completion Procedure**

- a) MIRU WWSU, reverse unit and associated equipment. **(Refer to NGMP info.)**
- b) Install B.O.P. RIH with bit and collars to drill out plugs.
- c) D/O & C/O plugs to apprx. 10,030'. Spot 30 ft cmt on CIBP to 1000' PBTD.
- d) Squeeze existing permt 8870' to 8942' as needed.
- e) Perf interval at selected porosity between 9600' to 9950'.
- f) Acidize w/ ~2500 gals HCl per 1000'. Swab and/or circulate hole clean.
- g) RIH with nickel plated 5.5" or equiv. VFE retrievable packer or equivalent on 2.875" or 3.5" IPC or equiv. tubing w/ PKR @ 9500'+, pump clean fresh water containing corrosion inhibitor, biocide and oxygen scavenger down annulus, set packer. Prepare to run MIT test and notify OCD to witness 24 hours in advance.
- h) Build injection facility and start water disposal. Per SWD-1582; limit injection pressure to 1920 psi.

**3. Tubular program** - The well casing is set as described above. (See attached Proposed Well Schematic) 2-7/8" (3.5" optionally) internally coated tubing will be run and set in a packer located at approximately 9500' (within 100' of the uppermost injection perfs).

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Production	5.5"	17.0/20.0#	7.875" hole	11349'	700 sx 'H'	Calc. to Circ.
<b>Set CIBP @ 10030' - Spot 30 ft cement for estimated 10000' PBTD</b>						

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- 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<sub>2</sub>S Safety** - There is a low risk of H<sub>2</sub>S in this area. The operator will comply with the provisions of company H<sub>2</sub>S contingency plan as applicable. All personnel will wear monitoring devices and a wind direction sock will be placed on location.

**Well Re-entry Program (cont.)**

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 4500 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.

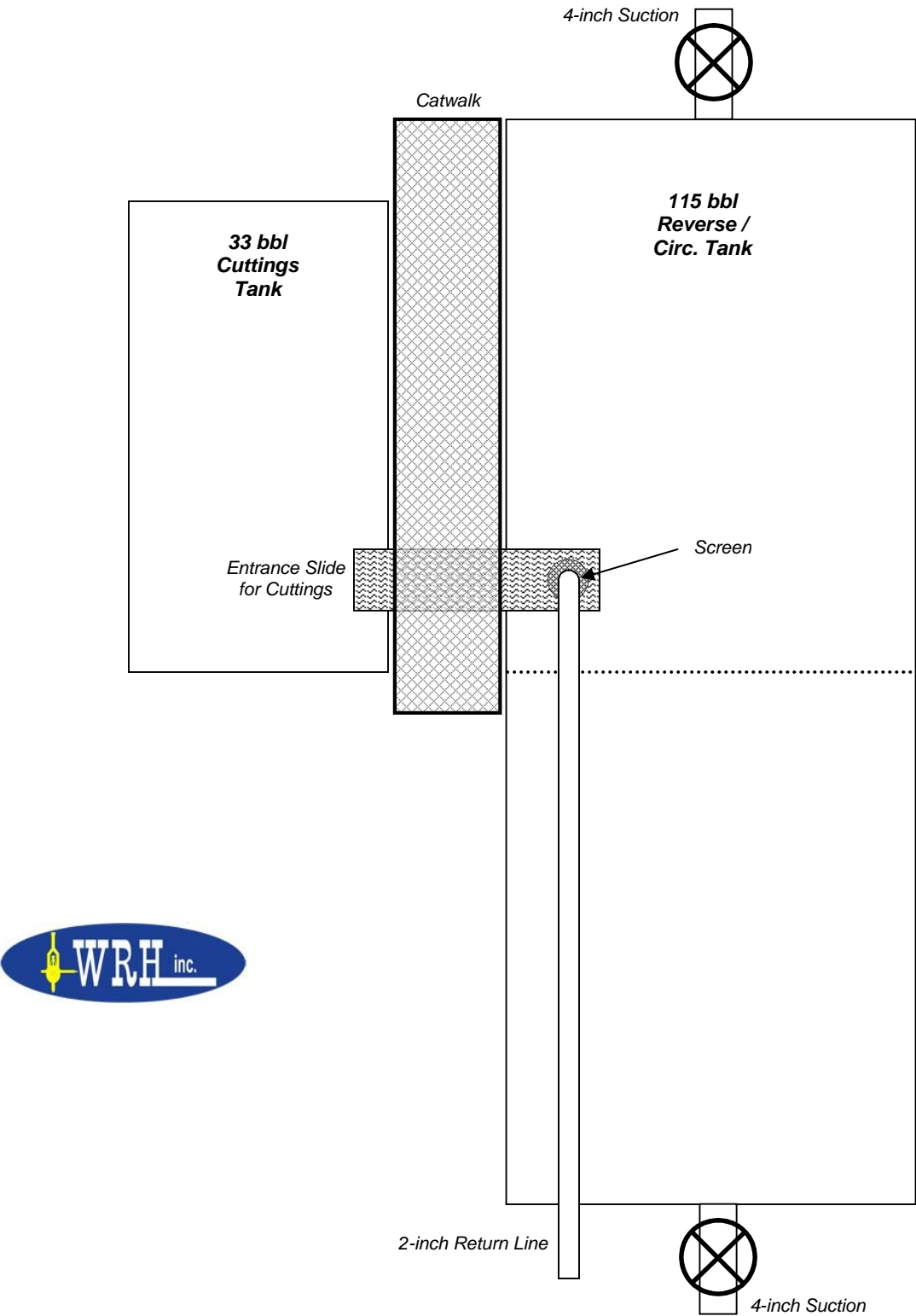
12. **Anticipated Start Date** – Ready now – MIRU 8/22/2021. Completion of the well operations will take two to three weeks. Installation of the tank battery, berms, plumbing and other and associated equipment would be occurring during the same interval.

In any event, it is not expected for the construction phase of the project to last more than 30 days, depending on availability of contractors and equipment. At the time of this submittal, the anticipated start date is:

**August 23, 2021.**

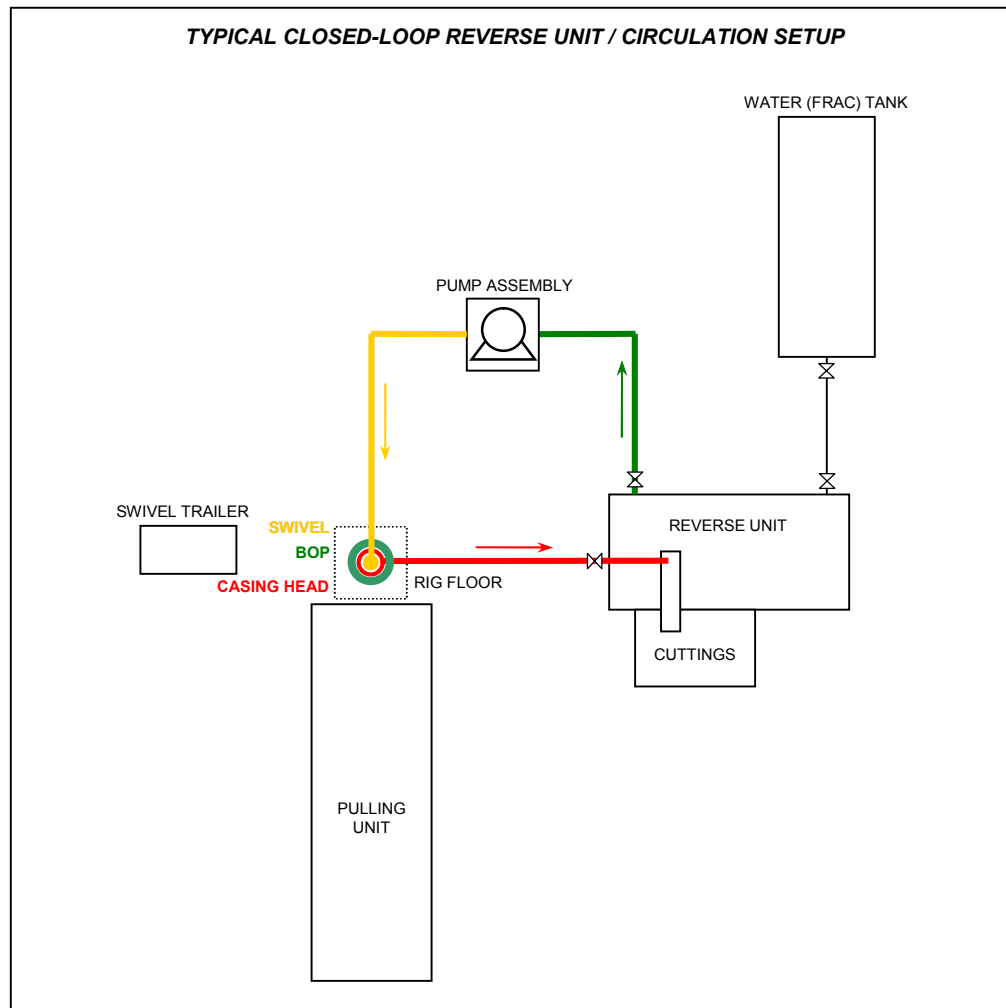
13. **Configure for Salt Water Disposal** – SWD Permit No. SWD-1582 (*extended expiration date September 23, 2022*). Prior to commencing any work, an NOI sundry(ies) will be submitted to configure the well for SWD and will detail the following tasks: drillout and workover including all work otherwise 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 ~5,000 bpd at a maximum surface injection pressure of 1920 psi.

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.



**Ray Westall Operating, Inc.  
 DHY B State SWD #1  
 API No. 30-015-21971  
 1980' FSL & 990' FWL  
 Sec. 11, Twp 19S, Rng 28 E  
 Eddy County, New Mexico**

### **Well Re-entry Program**

**Objective: Re-enter the existing wellbore by drilling out plugs, squeeze old perfs, circulate clean, set CIBP w/ cement cap to new PBTD of 10000', perforate, acidize and run new tubulars to configure for salt water disposal.**

**1. Geologic Information** - The Cisco Formation (Upper Penn) 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 [Pennsylvanian] Canyon formation consists of similarly medium-grained carbonates, primarily dolomite and porous and permeable sandstone interbedded with shale and is generally 150 to 200 feet in thickness.

The combined zones offer good porosity in the proposed injection interval located from 9600 feet to 9950 feet with some very good porosity interspersed throughout the overall interval.

The Cisco is overlain by the Wolfcamp and the Canyon is underlain by the Strawn and Atoka.

Fresh water in the area is generally available from the Santa Rosa formation (Capitan Basin). Based on State Engineer's records for a water well in Section 11, Twp 19S, Rng 28E, groundwater is at a depth to water of 265 feet.

### **Formation Tops**

San Andres	2500
Bone Spring	4303
Wolfcamp	8815
Penn	8988
Canyon	9540
Strawn	10020
Atoka	10297

### **2. Reentry Prep and Procedure**

- a) Excavate around the cutoff casing at the surface and constructing cellar.
- b) Expose surface casing or conductor by cutting back exterior casing stubs and removing cement between them, as required.
- c) Extend the surface casing to the surface or to the platform wellhead deck.
- d) Install new wellhead with the as sized (grade/ weight) and bradenhead valves.
- e) Test wellhead and casing extension with pressure sufficient to assure that the reconstructed well segment can contain expected surface pressures.
- f) Nipple up and test BOP.

**Well Re-entry Program (cont.)****3. Completion Procedure**

- a) MIRU WWSU, reverse unit and associated equipment. **(Refer to NGMP info.)**
- b) Install B.O.P. RIH with bit and collars to drill out plugs.
- c) D/O & C/O plugs to apprx. 10,030'. Spot 30 ft cmt on CIBP to 1000' PBTD.
- d) Squeeze existing permt 8870' to 8942' as needed.
- e) Perf interval at selected porosity between 9600' to 9950'.
- f) Acidize w/ ~2500 gals HCl per 1000'. Swab and/or circulate hole clean.
- g) RIH with nickel plated 5.5" or equiv. VFE retrievable packer or equivalent on 2.875" or 3.5" IPC or equiv. tubing w/ PKR @ 9500'+, pump clean fresh water containing corrosion inhibitor, biocide and oxygen scavenger down annulus, set packer. Prepare to run MIT test and notify OCD to witness 24 hours in advance.
- h) Build injection facility and start water disposal. Per SWD-1582; limit injection pressure to 1920 psi.

**3. Tubular program** - The well casing is set as described above. (See attached Proposed Well Schematic) 2-7/8" (3.5" optionally) internally coated tubing will be run and set in a packer located at approximately 9500' (within 100' of the uppermost injection perfs).

**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	415'	400 sx 'C'	Circ to Surf
Intermediate	8.625"	24.0/28.0#	11.0" hole	2800'	1121 sx 'C'	Circ to Surf
Production	5.5"	17.0/20.0#	7.875" hole	11349'	700 sx 'H'	Calc. to Circ.
<b>Set CIBP @ 10030' - Spot 30 ft cement for estimated 10000' PBTD</b>						

**5. Pressure Control** - BOP diagram is attached to this application. All BOP and related equipment shall comply with well control requirements as described NMOC 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<sub>2</sub>S Safety** - There is a low risk of H<sub>2</sub>S in this area. The operator will comply with the provisions of company H<sub>2</sub>S contingency plan as applicable. All personnel will wear monitoring devices and a wind direction sock will be placed on location.

**Well Re-entry Program (cont.)**

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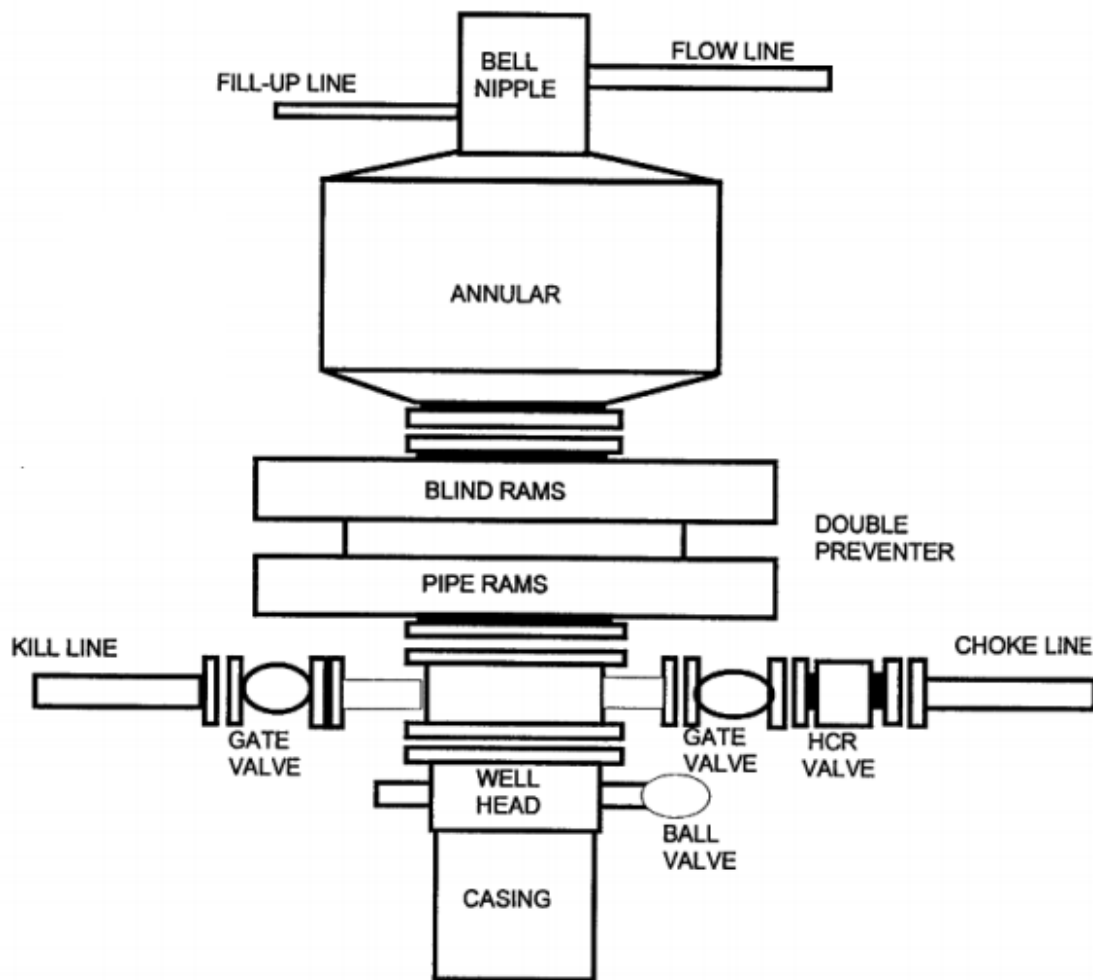
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## BLOWOUT PREVENTER DIAGRAM

3000 PSI WORKING PRESSURE



**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 Rd., Aztec, NM 87410  
Phone:(505) 334-6178 Fax:(505) 334-6170

**District IV**

1220 S. St Francis Dr., Santa Fe, NM 87505  
Phone:(505) 476-3470 Fax:(505) 476-3462

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

COMMENTS

Action 43491

**COMMENTS**

Operator: RAY WESTALL OPERATING, INC. P.O. Box 4 Loco Hills, NM 88255	OGRID: 119305
	Action Number: 43491
	Action Type: [C-101] Drilling Non-Federal/Indian (APD)

**COMMENTS**

Created By	Comment	Comment Date
kpickford	KP GEO Review 9/17/2021	9/17/2021
ahvermersch	Well status, well & work type will be changed upon receipt of completion report.	10/19/2021

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Created By	Condition	Condition Date
kpickford	None	9/17/2021