

P/P

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
**APPLICATION FOR PERMIT TO DRILL OR REENTER**

1a. Type of work:  DRILL  REENTER  
1b. Type of Well:  Oil Well  Gas Well  Other INJ-DIS  
1c. Type of Completion:  Hydraulic Fracturing  Single Zone  Multiple Zone

5. Lease Serial No.  
NMNM110836

6. If Indian, Allottee or Tribe Name

7. If Unit or CA Agreement, Name and No.

8. Lease Name and Well No.  
MEL SWD **FEDERAL**  
**(725107)**

9. API-Well No.  
**30-025-45670**

2. Name of Operator  
MESQUITE SWD INCORPORATED **(161968)**

3a. Address  
602 S Canyon Street Carlsbad NM 88221

3b. Phone No. (include area code)  
(575)887-0980

10. Field and Pool, or Exploratory  
SWD / DEVONIAN **(96101)**

4. Location of Well (Report location clearly and in accordance with any State requirements. \*)  
At surface NWNW / 880 FNL / 210 FWL / LAT 32.12084 / LONG -103.653656  
At proposed prod. zone NWNW / 880 FNL / 210 FWL / LAT 32.12084 / LONG -103.653656

11. Sec., T. R. M. or Blk. and Survey or Area  
SEC 23 / T25S / R32E / NMP

14. Distance in miles and direction from nearest town or post office\*  
27 miles

12. County or Parish  
LEA

13. State  
NM

15. Distance from proposed\* location to nearest property or lease line, ft.  
(Also to nearest drig. unit line, if any)  
210 feet

16. No of acres in lease  
1160

17. Spacing Unit dedicated to this well  
0

18. Distance from proposed location\* to nearest well, drilling, completed, applied for, on this lease, ft.  
739 feet

19. Proposed Depth  
0 feet / 0 feet

20. BLM/BIA Bond No. in file  
FED: NMB000612

21. Elevations (Show whether DF, KDB, RT, GL, etc.)  
3425 feet

22. Approximate date work will start\*  
03/01/2019

23. Estimated duration  
45 days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable)

- 1. Well plat certified by a registered surveyor.
- 2. A Drilling Plan.
- 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office)

- 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- 5. Operator certification.
- 6. Such other site specific information and/or plans as may be requested by the BLM.

25. Signature  
(Electronic Submission)

Name (Printed/Typed)  
Melanie Wilson / Ph: (575)914-1461

Date  
10/08/2018

Title  
Regulatory Analyst

Approved by (Signature)  
(Electronic Submission)

Name (Printed/Typed)  
Cody Layton / Ph: (575)234-5959

Date  
01/24/2019

Title  
Assistant Field Manager Lands & Minerals

Office  
CARLSBAD

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.  
Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

**APPROVED WITH CONDITIONS**  
Approval Date: 01/24/2019

*Handwritten signature and date*  
07/01/19

## PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

<b>OPERATOR'S NAME:</b>	Mesquite SWD INC.
<b>LEASE NO.:</b>	NMNM110836
<b>WELL NAME &amp; NO.:</b>	1- MEL SWD
<b>SURFACE HOLE FOOTAGE:</b>	210'/N & 210'/W
<b>BOTTOM HOLE FOOTAGE:</b>	Same as above
<b>LOCATION:</b>	Section 23., T25S., R32E NMP
<b>COUNTY:</b>	LEA County, New Mexico

COA

H2S	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Potash	<input checked="" type="radio"/> None	<input type="radio"/> Secretary	<input type="radio"/> R-111-P
Cave/Karst Potential	<input checked="" type="radio"/> Low	<input type="radio"/> Medium	<input type="radio"/> High
Variance	<input type="radio"/> None	<input checked="" type="radio"/> Flex Hose	<input type="radio"/> Other
Wellhead	<input checked="" type="radio"/> Conventional	<input type="radio"/> Multibowl	<input type="radio"/> Both
Other	<input type="checkbox"/> 4 String Area	<input type="checkbox"/> Capitan Reef	<input type="checkbox"/> WIPP

### A. Hydrogen Sulfide

A Hydrogen Sulfide (H2S) Drilling Plan shall be activated 500 feet prior to drilling into the **Delaware** formation. As a result, the Hydrogen Sulfide area must meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.

### B. CASING

1. The **20** inch surface casing shall be set at approximately **950** feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt) and cemented to the surface.
  - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
  - b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8 hours** or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
  - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.

- d. If cement falls back, remedial cementing will be done prior to drilling out that string.

**Intermediate casing must be kept fluid filled to meet BLM minimum collapse requirement.**

2. The minimum required fill of cement behind the **13-3/8** inch intermediate casing is:
  - Cement to surface. If cement does not circulate see B.1.a, c-d above.
3. The minimum required fill of cement behind the **9-5/8** inch production casing is:
  - Cement should tie-back at least **200** feet into previous casing string. Operator shall provide method of verification.

**Intermediate casing must be kept fluid filled to meet BLM minimum collapse requirement.**

4. The minimum required fill of cement behind the **7-5/8** inch production liner is:
  - Cement should tie-back **100'** into the previous casing. Operator shall provide method of verification.

**Open hole completion from 17300 feet – 18500 feet**

### **C. PRESSURE CONTROL**

1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).'
2. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **2000 (2M)** psi.
3. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the **13-3/8** intermediate casing shoe shall be **5000 (5M)** psi.
4. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the **9-5/8** production casing shoe shall be **10,000 (10M)** psi. **Variance is approved to use a 5M Annular which shall be tested to 5000 psi.**

## D. SPECIAL REQUIREMENT

### WELL COMPLETION

**The operator shall supply the BLM with a copy of a mudlog over the permitted disposal interval and estimated insitu water salinity based on open-hole logs. If hydrocarbon shows occur while drilling, the operator shall notify the BLM.**

**The operator shall provide to the BLM a summary of formation depth picks based on mudlog and geophysical logs along with a copy of the mudlog and open hole logs from TD to top of Devonian**

A NOI sundry with the completion procedure for this well shall be submitted and approved prior to commencing completion work. The procedure will be reviewed to verify that the completion proposal will allow the operator to:

1. Properly evaluate the injection zone utilizing open hole logs, swab testing and/or any other method to confirm that hydrocarbons cannot be produced in paying quantities. This evaluation shall be reviewed by the BLM prior to injection commencing.
2. Restrict the injection fluid to the approved formation.
3. If a step rate test will be run an NOI sundry shall be submitted to the BLM for approval

If off-lease water will be disposed in this well, the operator shall provide proof of right-of-way approval.

LV 01172019

## GENERAL REQUIREMENTS

The BLM is to be notified in advance for a representative to witness:

- a. Spudding well (minimum of 24 hours)
- b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
- c. BOPE tests (minimum of 4 hours)

Chaves and Roosevelt Counties  
Call the Roswell Field Office, 2909 West Second St., Roswell NM 88201.  
During office hours call (575) 627-0272.  
After office hours call (575)

Eddy County  
Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,

(575) 361-2822

Lea County

Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575)  
393-3612

1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
  - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
  - b. When the operator proposes to set surface casing with Spudder Rig
    - Notify the BLM when moving in and removing the Spudder Rig.
    - Notify the BLM when moving in the 2<sup>nd</sup> Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
    - BOP/BOPE test to be conducted per Onshore Oil and Gas Order No. 2 as soon as 2nd Rig is rigged up on well.
2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
3. The record of the drilling rate along with the GR/N well log (one log per well pad is acceptable) run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

#### A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.

2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

#### B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if

exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.

3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
  - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
  - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
  - c. Manufacturer representative shall install the test plug for the initial BOP test.
  - d. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
  - e. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.
5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
  - a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
  - b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time, except

the casing pressure test can be initiated immediately after bumping the plug (only applies to single stage cement jobs).

- c. The tests shall be done by an independent service company utilizing a test plug. The results of the test shall be reported to the appropriate BLM office.
- d. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
- e. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- f. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes. This test shall be performed prior to the test at full stack pressure.
- g. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

#### C. DRILLING MUD

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation, and shall be used until production casing is run and cemented.

#### D. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

**PECOS DISTRICT  
SURFACE USE  
CONDITIONS OF APPROVAL**

<b>OPERATOR'S NAME:</b>	Mesquite SWD INC.
<b>LEASE NO.:</b>	NMNM110836
<b>WELL NAME &amp; NO.:</b>	1- MEL SWD
<b>SURFACE HOLE FOOTAGE:</b>	210'N & 210'/W
<b>BOTTOM HOLE FOOTAGE</b>	Same as above
<b>LOCATION:</b>	Section 23., T25S., R32E NMP
<b>COUNTY:</b>	LEA County, New Mexico

**TABLE OF CONTENTS**

Standard Conditions of Approval (COA) apply to this APD. If any deviations to these standards exist or special COAs are required, the section with the deviation or requirement will be checked below.

- General Provisions**
- Permit Expiration**
- Archaeology, Paleontology, and Historical Sites**
- Noxious Weeds**
- Special Requirements**
  - Lesser Prairie-Chicken Timing Stipulations
  - Ground-level Abandoned Well Marker
  - Hydrology
- Construction**
  - Notification
  - Topsoil
  - Closed Loop System
  - Federal Mineral Material Pits
  - Well Pads
  - Roads
- Road Section Diagram**
- Production (Post Drilling)**
  - Well Structures & Facilities
- Interim Reclamation**
- Final Abandonment & Reclamation**

## **I. GENERAL PROVISIONS**

The approval of the Application For Permit To Drill (APD) is in compliance with all applicable laws and regulations: 43 Code of Federal Regulations 3160, the lease terms, Onshore Oil and Gas Orders, Notices To Lessees, New Mexico Oil Conservation Division (NMOCD) Rules, National Historical Preservation Act As Amended, and instructions and orders of the Authorized Officer. Any request for a variance shall be submitted to the Authorized Officer on Form 3160-5, Sundry Notices and Report on Wells.

## **II. PERMIT EXPIRATION**

If the permit terminates prior to drilling and drilling cannot be commenced within 60 days after expiration, an operator is required to submit Form 3160-5, Sundry Notices and Reports on Wells, requesting surface reclamation requirements for any surface disturbance. However, if the operator will be able to initiate drilling within 60 days after the expiration of the permit, the operator must have set the conductor pipe in order to allow for an extension of 60 days beyond the expiration date of the APD. (Filing of a Sundry Notice is required for this 60 day extension.)

## **III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES**

Any cultural and/or paleontological resource discovered by the operator or by any person working on the operator's behalf shall immediately report such findings to the Authorized Officer. The operator is fully accountable for the actions of their contractors and subcontractors. The operator shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery shall be made by the Authorized Officer to determine the appropriate actions that shall be required to prevent the loss of significant cultural or scientific values of the discovery. The operator shall be held responsible for the cost of the proper mitigation measures that the Authorized Officer assesses after consultation with the operator on the evaluation and decisions of the discovery. Any unauthorized collection or disturbance of cultural or paleontological resources may result in a shutdown order by the Authorized Officer.

## **IV. NOXIOUS WEEDS**

The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

## V. SPECIAL REQUIREMENT(S)

### **Timing Limitation Stipulation / Condition of Approval for lesser prairie-chicken:**

Oil and gas activities including 3-D geophysical exploration, and drilling will not be allowed in lesser prairie-chicken habitat during the period from March 1st through June 15th annually. During that period, other activities that produce noise or involve human activity, such as the maintenance of oil and gas facilities, pipeline, road, and well pad construction, will be allowed except between 3:00 am and 9:00 am. The 3:00 am to 9:00 am restriction will not apply to normal, around-the-clock operations, such as venting, flaring, or pumping, which do not require a human presence during this period. Additionally, no new drilling will be allowed within up to 200 meters of leks known at the time of permitting. Normal vehicle use on existing roads will not be restricted. Exhaust noise from pump jack engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 feet from the source of the noise.

**Ground-level Abandoned Well Marker to avoid raptor perching:** Upon the plugging and subsequent abandonment of the well, the well marker will be installed at ground level on a plate containing the pertinent information for the plugged well. For more installation details, contact the Carlsbad Field Office at 575-234-5972.

This authorization is subject to your Certificate of Participation and/or Certificate of Inclusion under the New Mexico Candidate Conservation Agreement. Because it involves surface disturbing activities covered under your Certificate, your Habitat Conservation Fund Account with the Center of Excellence for Hazardous Materials Management (CEHMM) will be debited according to Exhibit B Part 2 of the Certificate of Participation.

### **Hydrology:**

The entire well pad will be bermed to prevent oil, salt, and other chemical contaminants from leaving the well pad. The compacted berm shall be constructed at a minimum of 12 inches with impermeable mineral material (e.g. caliche). Topsoil shall not be used to construct the berm. No water flow from the uphill side(s) of the pad shall be allowed to enter the well pad. The integrity of the berm shall be maintained around the surfaced pad throughout the life of the well and around the downsized pad after interim reclamation has been completed. Any water erosion that may occur due to the construction of the well pad during the life of the well will be quickly corrected and proper measures will be taken to prevent future erosion. Stockpiling of topsoil is required. The top soil shall be stockpiled in an appropriate location to prevent loss of soil due to water or wind erosion and not used for berming or erosion control. If fluid collects within the bermed area, the fluid must be vacuumed into a safe container and disposed of properly at a state approved facility.

Storage tank facility locations will be lined and bermed. A 20 mil permanent liner will be installed with a 4 oz. felt backing to prevent tears or punctures. Berms must be large enough to contain 1 ½ times the content of the largest tank or 24 hour production, whichever is greater. Automatic shut off, check valves, or similar systems will be

installed for tanks to minimize the effects of catastrophic line failures used in production or drilling.

A leak detection plan will be submitted to the BLM Carlsbad Field Office for approval prior to pipeline installation. The method could incorporate gauges to detect pressure drops, situating valves and lines so they can be visually inspected periodically or installing electronic sensors to alarm when a leak is present. The leak detection plan will incorporate an automatic shut off system that will be installed for proposed pipelines to minimize the effects of an undesirable event.

Electric Lines: Any water erosion that may occur due to the construction of overhead electric line and during the life of the power line will be quickly corrected and proper measures will be taken to prevent future erosion.

## **VI. CONSTRUCTION**

### **A. NOTIFICATION**

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Carlsbad Field Office at (575) 234-5909 at least 3 working days prior to commencing construction of the access road and/or well pad.

When construction operations are being conducted on this well, the operator shall have the approved APD and Conditions of Approval (COA) on the well site and they shall be made available upon request by the Authorized Officer.

### **B. TOPSOIL**

The operator shall strip the top portion of the soil (root zone) from the entire well pad area and stockpile the topsoil along the edge of the well pad as depicted in the APD. The root zone is typically six (6) inches in depth. All the stockpiled topsoil will be redistributed over the interim reclamation areas. Topsoil shall not be used for berming the pad or facilities. For final reclamation, the topsoil shall be spread over the entire pad area for seeding preparation.

Other subsoil (below six inches) stockpiles must be completely segregated from the topsoil stockpile. Large rocks or subsoil clods (not evident in the surrounding terrain) must be buried within the approved area for interim and final reclamation.

### **C. CLOSED LOOP SYSTEM**

Tanks are required for drilling operations: No Pits.

The operator shall properly dispose of drilling contents at an authorized disposal site.

### **D. FEDERAL MINERAL MATERIALS PIT**

Payment shall be made to the BLM prior to removal of any federal mineral materials. Call the Carlsbad Field Office at (575) 234-5972.

### **E. WELL PAD SURFACING**

Surfacing of the well pad is not required.

If the operator elects to surface the well pad, the surfacing material may be required to be removed at the time of reclamation. The well pad shall be constructed in a manner which creates the smallest possible surface disturbance, consistent with safety and operational needs.

### **F. EXCLOSURE FENCING (CELLARS & PITS)**

**Exclosure Fencing**

The operator will install and maintain exclosure fencing for all open well cellars to prevent access to public, livestock, and large forms of wildlife before and after drilling operations until the pit is free of fluids and the operator initiates backfilling. (For examples of exclosure fencing design, refer to BLM's Oil and Gas Gold Book, Exclosure Fence Illustrations, Figure 1, Page 18.)

**G. ON LEASE ACCESS ROADS****Road Width**

The access road shall have a driving surface that creates the smallest possible surface disturbance and does not exceed fourteen (14) feet in width. The maximum width of surface disturbance, when constructing the access road, shall not exceed twenty-five (25) feet.

**Surfacing**

Surfacing material is not required on the new access road driving surface. If the operator elects to surface the new access road or pad, the surfacing material may be required to be removed at the time of reclamation.

Where possible, no improvements should be made on the unsurfaced access road other than to remove vegetation as necessary, road irregularities, safety issues, or to fill low areas that may sustain standing water.

The Authorized Officer reserves the right to require surfacing of any portion of the access road at any time deemed necessary. Surfacing may be required in the event the road deteriorates, erodes, road traffic increases, or it is determined to be beneficial for future field development. The surfacing depth and type of material will be determined at the time of notification.

**Crowning**

Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

**Ditching**

Ditching shall be required on both sides of the road.

**Turnouts**

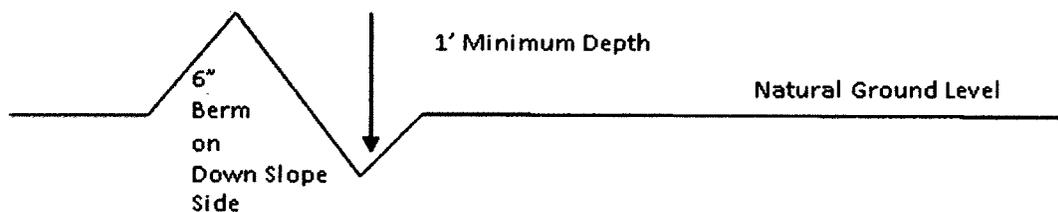
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall conform to Figure 1; cross section and plans for typical road construction.

**Drainage**

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill out-sloping and in-sloping, lead-off ditches, culvert installation, and low water crossings).

A typical lead-off ditch has a minimum depth of 1 foot below and a berm of 6 inches above natural ground level. The berm shall be on the down-slope side of the lead-off ditch.

### Cross Section of a Typical Lead-off Ditch



All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval are variable for lead-off ditches and shall be determined according to the formula for spacing intervals of lead-off ditches, but may be amended depending upon existing soil types and centerline road slope (in %);

### Formula for Spacing Interval of Lead-off Ditches

Example - On a 4% road slope that is 400 feet long, the water flow shall drain water into a lead-off ditch. Spacing interval shall be determined by the following formula:

$$400 \text{ foot road with } 4\% \text{ road slope: } \frac{400'}{4\%} + 100' = 200' \text{ lead-off ditch interval}$$

### Cattle guards

An appropriately sized cattle guard sufficient to carry out the project shall be installed and maintained at fence/road crossings. Any existing cattle guards on the access road route shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattle guards that are in place and are utilized during lease operations.

### Fence Requirement

Where entry is granted across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting. The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fences.

### Livestock Watering Requirement

Structures that provide water to livestock, such as windmills, pipelines, drinking troughs, and earthen reservoirs, will be avoided by moving the proposed action.

-OR-

Any damage to structures that provide water to livestock throughout the life of the well, caused by operations from the well site, must be immediately corrected by the operator. The operator must notify the BLM office (575-234-5972) and the private surface landowner or the grazing allotment holder if any damage occurs to structures that provide water to livestock.

**Public Access**

Public access on this road shall not be restricted by the operator without specific written approval granted by the Authorized Officer.

- Construction Steps**
1. Salvage topsoil
  2. Construct road
  3. Redistribute topsoil
  4. Revegetate slopes

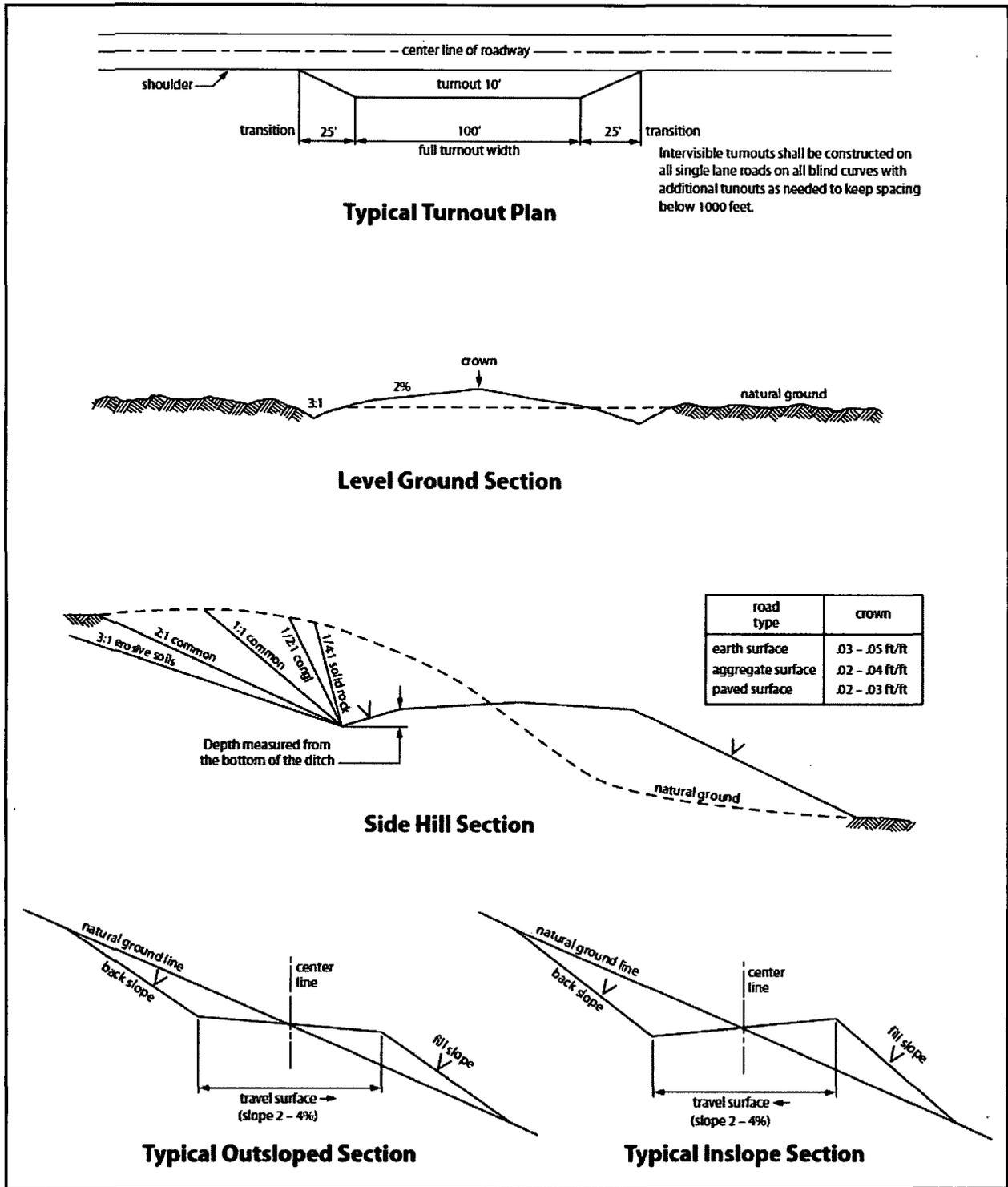


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

## **VII. PRODUCTION (POST DRILLING)**

### **A. WELL STRUCTURES & FACILITIES**

#### **Placement of Production Facilities**

Production facilities should be placed on the well pad to allow for maximum interim recontouring and revegetation of the well location.

#### **Exclosure Netting (Open-top Tanks)**

Immediately following active drilling or completion operations, the operator will take actions necessary to prevent wildlife and livestock access, including avian wildlife, to all open-topped tanks that contain or have the potential to contain salinity sufficient to cause harm to wildlife or livestock, hydrocarbons, or Resource Conservation and Recovery Act of 1976-exempt hazardous substances. At a minimum, the operator will net, screen, or cover open-topped tanks to exclude wildlife and livestock and prevent mortality. If the operator uses netting, the operator will cover and secure the open portion of the tank to prevent wildlife entry. The operator will net, screen, or cover the tanks until the operator removes the tanks from the location or the tanks no longer contain substances that could be harmful to wildlife or livestock. Use a maximum netting mesh size of 1 ½ inches. The netting must not be in contact with fluids and must not have holes or gaps.

#### **Chemical and Fuel Secondary Containment and Exclosure Screening**

The operator will prevent all hazardous, poisonous, flammable, and toxic substances from coming into contact with soil and water. At a minimum, the operator will install and maintain an impervious secondary containment system for any tank or barrel containing hazardous, poisonous, flammable, or toxic substances sufficient to contain the contents of the tank or barrel and any drips, leaks, and anticipated precipitation. The operator will dispose of fluids within the containment system that do not meet applicable state or U. S. Environmental Protection Agency livestock water standards in accordance with state law; the operator must not drain the fluids to the soil or ground. The operator will design, construct, and maintain all secondary containment systems to prevent wildlife and livestock exposure to harmful substances. At a minimum, the operator will install effective wildlife and livestock exclosure systems such as fencing, netting, expanded metal mesh, lids, and grate covers. Use a maximum netting mesh size of 1 ½ inches.

#### **Open-Vent Exhaust Stack Exclosures**

The operator will construct, modify, equip, and maintain all open-vent exhaust stacks on production equipment to prevent birds and bats from entering, and to discourage perching, roosting, and nesting. (*Recommended exclosure structures on open-vent exhaust stacks are in the shape of a cone.*) Production equipment includes, but may not be limited to, tanks, heater-treaters, separators, dehydrators, flare stacks, in-line units, and compressor mufflers.

#### **Containment Structures**

Proposed production facilities such as storage tanks and other vessels will have a secondary containment structure that is constructed to hold the capacity of 1.5 times the largest tank, plus freeboard to account for precipitation, unless more stringent protective requirements are deemed necessary.

#### **Painting Requirement**

All above-ground structures including meter housing that are not subject to safety requirements shall be painted a flat non-reflective paint color, **Shale Green** from the BLM Standard Environmental Color Chart (CC-001: June 2008).

### **VIII. INTERIM RECLAMATION**

During the life of the development, all disturbed areas not needed for active support of production operations should undergo interim reclamation in order to minimize the environmental impacts of development on other resources and uses.

Within six (6) months of well completion, operators should work with BLM surface management specialists (Jim Amos: 575-234-5909) to devise the best strategies to reduce the size of the location. Interim reclamation should allow for remedial well operations, as well as safe and efficient removal of oil and gas.

During reclamation, the removal of caliche is important to increasing the success of revegetating the site. Removed caliche that is free of contaminants may be used for road repairs, fire walls or for building other roads and locations. In order to operate the well or complete workover operations, it may be necessary to drive, park and operate on restored interim vegetation within the previously disturbed area. Disturbing revegetated areas for production or workover operations will be allowed. If there is significant disturbance and loss of vegetation, the area will need to be revegetated. Communicate with the appropriate BLM office for any exceptions/exemptions if needed.

All disturbed areas after they have been satisfactorily prepared need to be reseeded with the seed mixture provided below.

Upon completion of interim reclamation, the operator shall submit a Sundry Notices and Reports on Wells, Subsequent Report of Reclamation (Form 3160-5).

### **IX. FINAL ABANDONMENT & RECLAMATION**

At final abandonment, well locations, production facilities, and access roads must undergo "final" reclamation so that the character and productivity of the land are restored.

Earthwork for final reclamation must be completed within six (6) months of well plugging. All pads, pits, facility locations and roads must be reclaimed to a satisfactory

revegetated, safe, and stable condition, unless an agreement is made with the landowner or BLM to keep the road and/or pad intact.

After all disturbed areas have been satisfactorily prepared, these areas need to be revegetated with the seed mixture provided below. Seeding should be accomplished by drilling on the contour whenever practical or by other approved methods. Seeding may need to be repeated until revegetation is successful, as determined by the BLM.

Operators shall contact a BLM surface protection specialist prior to surface abandonment operations for site specific objectives (Jim Amos: 575-234-5909).

Ground-level Abandoned Well Marker to avoid raptor perching: Upon the plugging and subsequent abandonment of the well, the well marker will be installed at ground level on a plate containing the pertinent information for the plugged well.

## Seed Mixture for LPC Sand/Shinnery Sites

Holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)\* per acre. There shall be no primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed shall be done in accordance with State law(s) and within nine (9) months prior to purchase. Commercial seed shall be either certified or registered seed. The seed container shall be tagged in accordance with State law(s) and available for inspection by the Authorized Officer.

Seed will be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (smaller/heavier seeds have a tendency to drop the bottom of the drill and are planted first). Holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. Seeding shall be repeated until a satisfactory stand is established as determined by the Authorized Officer. Evaluation of growth may not be made before completion of at least one full growing season after seeding.

Species to be planted in pounds of pure live seed\* per acre:

<u>Species</u>	<u>lb/acre</u>
Plains Bristlegrass	5lbs/A
Sand Bluestem	5lbs/A
Little Bluestem	3lbs/A
Big Bluestem	6lbs/A
Plains Coreopsis	2lbs/A
Sand Dropseed	1lbs/A

\*Pounds of pure live seed:

Pounds of seed x percent purity x percent germination = pounds pure live seed



U.S. Department of the Interior  
BUREAU OF LAND MANAGEMENT

## Operator Certification Data Report

01/28/2019

### Operator Certification

*I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.*

**NAME:** Melanie Wilson

**Signed on:** 06/20/2017

**Title:** Regulatory Analyst

**Street Address:** 106 W. Riverside Drive

**City:** Calsbad

**State:** NM

**Zip:** 88220

**Phone:** (575)914-1461

**Email address:** mjp1692@gmail.com

### Field Representative

**Representative Name:** Riley Neatherlin

**Street Address:** PO Box 1479

**City:** Carlsbad

**State:** NM

**Zip:** 88220

**Phone:** (575)702-7288

**Email address:** riley@mesquiteswd.net



APD ID: 10400034740

Submission Date: 10/08/2018

Operator Name: MESQUITE SWD INCORPORATED

Highlighted data  
reflects the most  
recent changes.

Well Name: MEL SWD

Well Number: 1

Show Final Text

Well Type: INJECTION - DISPOSAL

Well Work Type: Drill

**Section 1 - General**

APD ID: 10400034740

Tie to previous NOS?

Submission Date: 10/08/2018

BLM Office: CARLSBAD

User: Melanie Wilson

Title: Regulatory Analyst

Federal/Indian APD: FED

Is the first lease penetrated for production Federal or Indian? FED

Lease number: NMNM110836

Lease Acres: 1160

Surface access agreement in place?

Allotted?

Reservation:

Agreement in place? NO

Federal or Indian agreement:

Agreement number:

Agreement name:

Keep application confidential? YES

Permitting Agent? NO

APD Operator: MESQUITE SWD INCORPORATED

Operator letter of designation:

**Operator Info**

Operator Organization Name: MESQUITE SWD INCORPORATED

Operator Address: 602 S Canyon Street

Zip: 88221

Operator PO Box: PO Box 1479

Operator City: Carlsbad

State: NM

Operator Phone: (575)887-0980

Operator Internet Address: mjp1692@gmail.com

**Section 2 - Well Information**

Well in Master Development Plan? NO

Master Development Plan name:

Well in Master SUPO? NO

Master SUPO name:

Well in Master Drilling Plan? NO

Master Drilling Plan name:

Well Name: MEL SWD

Well Number: 1

Well API Number:

Field/Pool or Exploratory? Field and Pool

Field Name: SWD

Pool Name: DEVONIAN

Is the proposed well in an area containing other mineral resources? USEABLE WATER

Operator Name: MESQUITE SWD INCORPORATED

Well Name: MEL SWD

Well Number: 1

Describe other minerals:

Is the proposed well in a Helium production area? N Use Existing Well Pad? NO New surface disturbance?

Type of Well Pad: SINGLE WELL

Multiple Well Pad Name: Number:

Well Class: VERTICAL

Number of Legs:

Well Work Type: Drill

Well Type: INJECTION - DISPOSAL

Describe Well Type:

Well sub-Type: INJECTION - DISPOSAL

Describe sub-type:

Distance to town: 27 Miles Distance to nearest well: 739 FT Distance to lease line: 210 FT

Reservoir well spacing assigned acres Measurement: 0 Acres

Well plat: Mel\_SWD\_1\_C102\_Rev1\_20181218083923.pdf

Well work start Date: 03/01/2019 Duration: 45 DAYS

Section 3 - Well Location Table

Survey Type: RECTANGULAR

Describe Survey Type:

Datum: NAD83

Vertical Datum: NAVD88

Survey number:

	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD
SHL Leg #1	830	FNL	210	FWL	25S	32E	23	Aliquot NWN W	32.12034	-103.653656	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 110836	3425	0	0
BHL Leg #1	830	FNL	210	FWL	25S	32E	23	Aliquot NWN W	32.12034	-103.653656	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 110836	3425	0	0



APD ID: 10400034740

Submission Date: 10/08/2018

Highlighted data reflects the most recent changes.

Operator Name: MESQUITE SWD INCORPORATED

Well Name: MEL SWD

Well Number: 1

Show Final Text

Well Type: INJECTION - DISPOSAL

Well Work Type: Drill

**Section 1 - Geologic Formations**

Formation ID	Formation Name	Elevation	True Vertical Depth	Measured Depth	Lithologies	Mineral Resources	Producing Formation
1	UNKNOWN	3430	0	0		NONE	No
2	RUSTLER	2505	925	925		NONE	No
3	TOP SALT	2155	1275	1275		NONE	No
4	BASE OF SALT	-765	4195	4195		NONE	No
5	DELAWARE	-870	4300	4300		NATURAL GAS,OIL	No
6	BONE SPRING	-5986	9416	9416		NATURAL GAS,OIL	No
7	WOLFCAMP	-8422	11852	11852		NATURAL GAS,OIL	No
8	STRAWN	-10626	14056	14056		NATURAL GAS,OIL	No
9	MORROW	-11526	14956	14956		NATURAL GAS,OIL	No
10	MISSISSIPPIAN	-13430	16860	16860		NATURAL GAS,OIL	No
11	DEVONIAN	-13872	17302	17302		NONE	No

**Section 2 - Blowout Prevention**

Pressure Rating (PSI): 10M

Rating Depth: 19000

**Equipment:** A 10M system will be installed according to Onshore Order #2 consisting of an Annular Preventer, BOP with two rams and a blind ram. BOP will be equipped with 2 side outlets (choke side shall be a minimum 3" line, and kill side will be a minimum 2" line). Kill line will be installed with (2) valves and a check valve (2" min) of proper pressure rating for the system. Remote kill line (2' min) will be installed and ran to the outer edge of the substructure and be unobstructed. A manual and hydraulic valve (3' min) will be installed on the choke line, 3 chokes will be used with one being remotely controlled. Fill up line will be installed above the uppermost preventer. Pressure gauge of proper pressure rating will be installed on choke manifold. Upper and lower kelly cocks will be utilized with handles readily available in plain sight. A float sub will be available at all times. All connections subject to well pressure will be flanged, welded, or clamped.

Requesting Variance? YES

Variance request: Flex hose variance 5M annular variance

**Operator Name:** MESQUITE SWD INCORPORATED

**Well Name:** MEL SWD

**Well Number:** 1

**Testing Procedure:** BOP and BOPE shall be installed, used, maintained, and tested in a manner necessary to assure well control and shall be in place and operational prior to drilling the surface casing shoe, unless otherwise stated by APD. The Annular shall be functionally operated at least weekly, and, pipe and blind rams shall be activated each trip. • The surface (20") BOP/BOPE pressure test will be made to hold 250 psi low, and 2000 psi high, • The first intermediate (13 3/8") BOP/BOPE pressure tests will be made to hold 250 psi low, and 5000 psi high, before drilling out the 1st intermediate shoe. • The second intermediate (9 5/8") BOP/BOPE pressure tests will be made to hole 250 psi low, and 10,000 psi high (on rams) and 250 low and 5000 psi high on annular, before drilling out the 2nd intermediate shoe.

**Choke Diagram Attachment:**

Mel\_SWD\_1\_Flex\_Hose\_Data\_20181002105251.pdf

**BOP Diagram Attachment:**

Mel\_SWD\_1\_2M\_\_BOP\_\_CHOKE\_MANIFOLD\_20181004134028.pdf

Mel\_SWD\_1\_5M\_\_BOP\_\_CHOKE\_MANIFOLD\_20181004134030.pdf

Mel\_SWD\_1\_10M\_\_BOP\_5M\_\_ANNULAR\_20181004134030.pdf

Mel\_SWD\_1\_Well\_Control\_Plan\_20181115065521.pdf

**Section 3 - Casing**

Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1	SURFACE	26	20.0	NEW	API	N	0	950	0	950			950	J-55	94	BUTT	1.29	4.6	DRY	15	DRY	15
2	INTERMEDIATE	17.5	13.375	NEW	API	N	0	4300	0	4300			4300	P-110	68	BUTT	1.32	1.24	DRY	7.23	DRY	7.44
3	PRODUCTION	12.25	9.625	NEW	API	N	0	11900	0	11900			11900	P-110	53.5	BUTT	1.28	1.18	DRY	3.29	DRY	3.4
4	LINER	8.5	7.625	NEW	API	N	11400	17300	11400	17300			5900	P-110	39	FJ	1.23	1.27	BUOY	4.01	BUOY	5.35

**Casing Attachments**

**Operator Name:** MESQUITE SWD INCORPORATED

**Well Name:** MEL SWD

**Well Number:** 1

**Casing Attachments**

---

**Casing ID:** 1      **String Type:** SURFACE

**Inspection Document:**

**Spec Document:**

**Tapered String Spec:**

**Casing Design Assumptions and Worksheet(s):**

MEL\_SWD\_1\_Csg\_Assumptions\_20181004140254.pdf

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**Casing ID:** 2      **String Type:** INTERMEDIATE

**Inspection Document:**

**Spec Document:**

**Tapered String Spec:**

**Casing Design Assumptions and Worksheet(s):**

MEL\_SWD\_1\_Csg\_Assumptions\_20181004140303.pdf

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**Casing ID:** 3      **String Type:** PRODUCTION

**Inspection Document:**

**Spec Document:**

**Tapered String Spec:**

**Casing Design Assumptions and Worksheet(s):**

MEL\_SWD\_1\_Csg\_Assumptions\_20181004140312.pdf

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Operator Name: MESQUITE SWD INCORPORATED

Well Name: MEL SWD

Well Number: 1

Casing Attachments

Casing ID: 4 String Type: LINER

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

MEL\_SWD\_1\_Csg\_Assumptions\_20181004140320.pdf

Mel\_SWD\_1\_7.625\_Pipe\_Specs\_20181115065559.pdf

Section 4 - Cement

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	950	1350	1.91	12.9	2565	100	Class C	35/65 Poz/C + 5% (BWOW) PF44 Salt + 6% PF20 Bentonite + 3 pps PF42 Kol-Seal + .4 pps PF45 Defoamer + .125 pps PF29 Cellophane
SURFACE	Tail		0	950	350	1.34	14.8	469	100	Class C	2% PF1 Calcium
INTERMEDIATE	Lead		0	4300	2115	1.91	12.9	4040	50	Class C	35/65 Poz/C + 5% (BWOW) PF44 Salt + 6% PF20 Bentonite + .3% PF13 Retarder + 3 pps PF42 Kol-Seal + .4 pps PF45 Defoamer + .125 pps PF29 Cellophane
INTERMEDIATE	Tail		0	4300	385	1.33	14.8	512	50	Class C	.3% PF13 Retarder
PRODUCTION	Lead	4500	0	1190 0	850	2.47	11.9	2100	30	H	50/50 Poz/H + 5% (BWOW) PF44 Salt + 10% PF20 Bentonite + .4% PF153 Antisettling Agent + .2% PF813

**Operator Name:** MESQUITE SWD INCORPORATED

**Well Name:** MEL SWD

**Well Number:** 1

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
											Retarder + 3 pps PF42 Kol-Seal + .4 pps PF45 Defoamer
PRODUCTION	Tail		0	1190 0	100	1.18	15.6	118	30	H	.3% PF13 Retarder + .3% PF606 Fluid Loss + .4 pps PF45 Defoamer
PRODUCTION	Lead		0	1190 0	830	2.47	11.9	2050	30	Class H	50/50 Poz/H + 5% (BWOW) PF44 Salt + 10% PF20 Bentonite + .4% PF153 Antisettleing Agent + .2% PF813 Retarder + 3 pps PF42 Kol-Seal + .4 pps PF45 Defoamer
PRODUCTION	Tail		0	1190 0	400	1.19	15.6	476	30	Class H	.3% PF13 Retarder + .3% PF606 Fluid Loss + .4 pps PF45 Defoamer
LINER	Lead		1140 0	1730 0	400	1.33	14.2	532	30	Class H	50/50 Poz/H + 3% PF44 (BWOW) (Salt) + 2% PF20 Bentonite + 1.2% PF606 Fluid Loss + .3% PF65 Dispersant + .14% PF813 Retarder + .1% PF153 Antisettling Agent + .4 pps PF45 Defoamer

### Section 5 - Circulating Medium

**Mud System Type:** Closed

**Will an air or gas system be Used?** NO

**Description of the equipment for the circulating system in accordance with Onshore Order #2:**

**Diagram of the equipment for the circulating system in accordance with Onshore Order #2:**

**Describe what will be on location to control well or mitigate other conditions:** Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times.

**Describe the mud monitoring system utilized:** PVT/Pason/Visual Monitoring

### Circulating Medium Table

**Operator Name:** MESQUITE SWD INCORPORATED

**Well Name:** MEL SWD

**Well Number:** 1

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	PH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
950	4300	SALT SATURATED	9.8	10.2							
0	950	SPUD MUD	8.4	9							
4300	1190 0	SALT SATURATED	9	9.4							
1190 0	1730 0	SALT SATURATED	12	13.5							
1730 0	1850 0	OTHER : FRESH WATER	8.4	8.6							

### Section 6 - Test, Logging, Coring

**List of production tests including testing procedures, equipment and safety measures:**

None planned

**List of open and cased hole logs run in the well:**

CBL,CNL,DIL,EL,FDC,GR,MUDLOG

**Coring operation description for the well:**

None planned

### Section 7 - Pressure

**Anticipated Bottom Hole Pressure:** 8424

**Anticipated Surface Pressure:** 8424

**Anticipated Bottom Hole Temperature(F):** 270

**Anticipated abnormal pressures, temperatures, or potential geologic hazards?** NO

**Describe:**

**Contingency Plans geohazards description:**

**Contingency Plans geohazards attachment:**

**Hydrogen Sulfide drilling operations plan required?** YES

**Hydrogen sulfide drilling operations plan:**

Mel\_SWD\_1\_H2S\_Plan\_20181004152956.pdf

**Operator Name:** MESQUITE SWD INCORPORATED

**Well Name:** MEL SWD

**Well Number:** 1

Mel\_SWD\_1\_H2S\_Plan\_Rig\_Layout\_20181005120531.pdf

### **Section 8 - Other Information**

**Proposed horizontal/directional/multi-lateral plan submission:**

**Other proposed operations facets description:**

**Other proposed operations facets attachment:**

**Other Variance attachment:**

# Gates E&S

North America

7603 Prairie Oak dr.

Houston, TX

Hydrostatic Test

Customer= AUSTIN

Date of test= 01/22/18

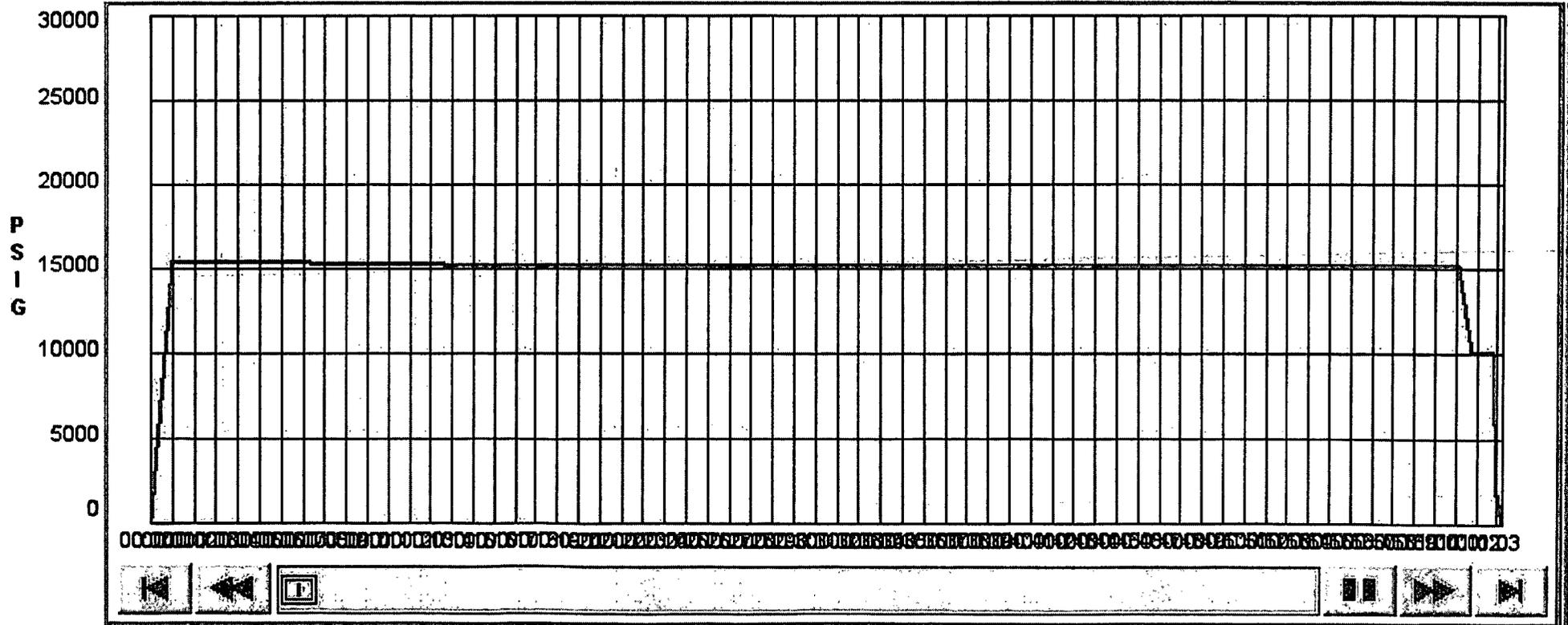
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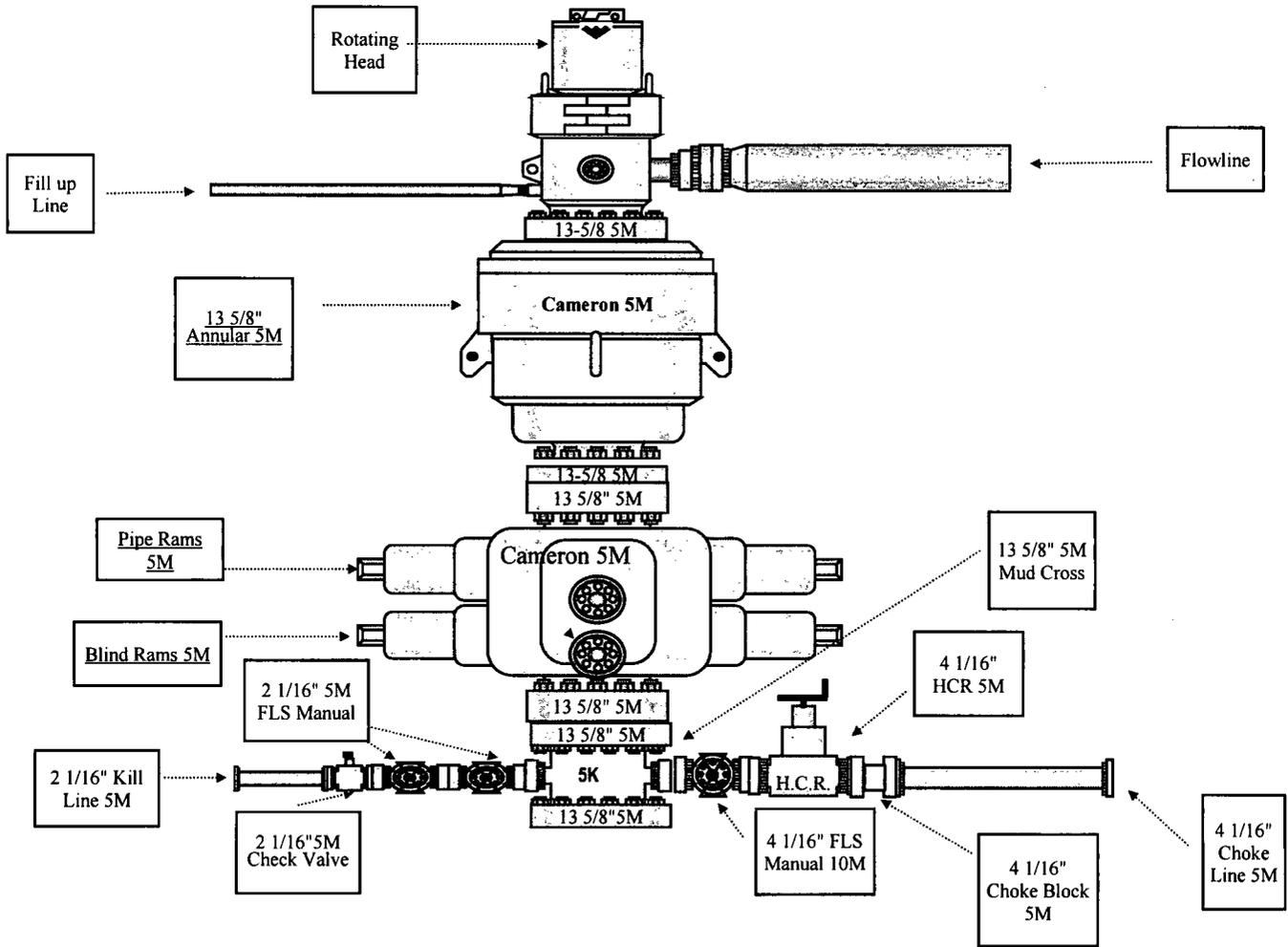
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01/22/2018 18:01:44

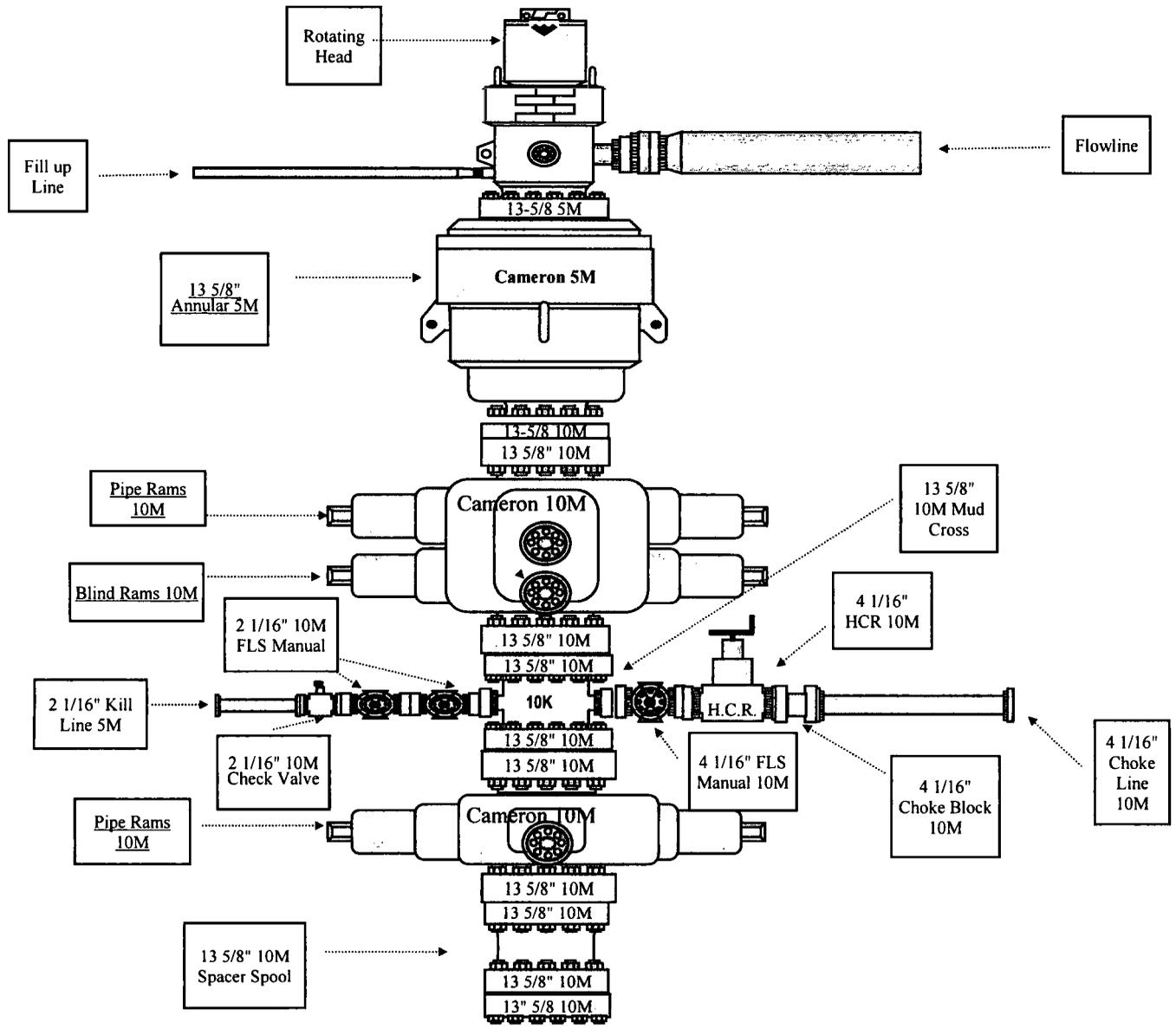
19:04:59



5M BOP with 5M Annular  
Mesquite SWD, Inc.



10M BOP with 5M Annular  
Mesquite SWD, Inc.



**Mesquite SWD, Inc.  
Well Control Plan**

**A. Component and Preventer Compatibility Table**

Component	OD	Preventer	RWP
Drill Pipe	5"	Upper VBR: 4" - 7" Lower: 5" fixed	10M
Heavyweight Drill Pipe	5"	Upper VBR: 4" - 7" Lower: 5" fixed	10M
Drill Collars & MWD Tools	6 1/2"	Upper VBR: 4" - 7"	10M
Mud Motor	6 1/2"	Upper VBR: 4" - 7"	10M
Production Casing	5 1/2"	Upper VBR: 4" - 7"	10M
All	0 - 13 5/8"	Annular	5M
Open Hole		Brind Rams	10M

**B. Well Control Procedures**

- I. General Procedures While Drilling:
  - a. Sound alarm – alert crew
  - b. Space out drill string
  - c. Shut down pumps and stop rotary
  - d. Open HCR
  - e. Shut well in, utilizing upper VBRs
  - f. Close choke
  - g. Confirm shut in
  - h. Notify rig manager and Mesquite SWD, Inc. company representative
  - i. Call Mesquite SWD, Inc. engineer
  - j. Read and record:
    - i. Shut in drill pressure and shut in casing pressure
    - ii. Pit gain
    - iii. Time
  - k. Regroup, identify forward plan
  
- II. General Procedures While Tripping:
  - a. Sound alarm – alert crew
  - b. Stab full opening safety valve and close
  - c. Space out drill string
  - d. Open HCR
  - e. Shut well in, utilizing upper VBRs
  - f. Close choke
  - g. Confirm shut in
  - h. Notify rig manager and Mesquite SWD, Inc. company representative
  - i. Call Mesquite SWD, Inc. engineer
  - j. Read and record:
    - i. Shut in drill pressure and shut in casing pressure
    - ii. Pit gain
    - iii. Time
  - k. Regroup, identify forward plan

**Mesquite SWD, Inc.**  
**Well Control Plan**

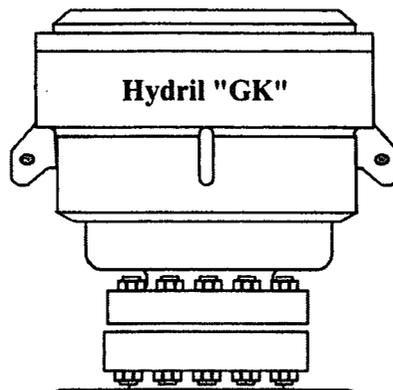
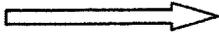
- III. General Procedures While Running Casing:
- a. Sound alarm – alert crew
  - b. Stab full opening safety valve and close
  - c. Space out drill string
  - d. Open HCR
  - e. Shut well in, utilizing upper VBRs
  - f. Close choke
  - g. Confirm shut in
  - h. Notify rig manager and Mesquite SWD, Inc. company representative
  - i. Call Mesquite SWD, Inc. engineer
  - j. Read and record:
    - i. Shut in drill pressure and shut in casing pressure
    - ii. Pit gain
    - iii. Time
  - k. Regroup, identify forward plan
- IV. General Procedures With No Pipe in Hole (Open Hole):
- a. Sound alarm – alert crew
  - b. Open HCR
  - c. Shut well in with blind rams
  - d. Close choke
  - e. Confirm shut in
  - f. Notify rig manager and Mesquite SWD, Inc. company representative
  - g. Call Mesquite SWD, Inc. engineer
  - h. Read and record:
    - i. Shut in drill pressure and shut in casing pressure
    - ii. Pit gain
    - iii. Time
  - i. Regroup, identify forward plan
- V. General Procedures While Pulling BHL Through BOP Stack:
- 1. Prior to pulling last joint of drill pipe through stack
    - A. Perform flow check and if flowing:
      - a. Sound alarm – alert crew
      - b. Stab full opening safety valve and close
      - c. Space out drill string with tool joint just beneath upper pipe ram
      - d. Open HCR
      - e. Shut well in utilizing upper VBRs
      - f. Close choke
      - g. Confirm shut in
      - h. Notify rig manager and Mesquite SWD, Inc. company representative
      - i. Call Mesquite SWD, Inc. engineer
      - j. Read and record:
        - i. Shut in drill pressure and shut in casing pressure
        - ii. Pit gain
        - iii. Time
      - k. Regroup, identify forward plan

## Mesquite SWD, Inc. Well Control Plan

2. With BHL in the BOP stack and compatible ram preventer and pipe combo immediately available.
  - a. Sound alarm – alert crew
  - b. Stab full opening safety valve and close
  - c. Space out drill string with tool joint just beneath upper pipe ram
  - d. Open HCR
  - e. Shut well in utilizing upper VBRs
  - f. Close choke
  - g. Confirm shut in
  - h. Notify rig manager and Mesquite SWD, Inc. company representative
  - i. Call Mesquite SWD, Inc. engineer
  - j. Read and record:
    - i. Shut in drill pressure and shut in casing pressure
    - ii. Pit gain
    - iii. Time
  - k. Regroup, identify forward plan
  
3. With BHA in the BOP stack and no compatible ram preventer and pipe combo immediately available
  - a. Sound alarm – alert crew
  - b. If possible to pick up high enough, pull string clear of the stack and follow Open Hole scenario (III)
  - c. If impossible to pick up high enough to pull the string clear of the stack:
    - i. Stab crossover, make up one joint/stand of drill pipe and full opening safety valve and close
    - ii. Space out drill string with tool joint just beneath the upper pipe ram
    - iii. Open HCR
    - iv. Shut in utilizing upper VBRs
    - v. Close choke
    - vi. Confirm shut in
    - vii. Notify rig manager and Mesquite SWD, Inc. company representative
    - viii. Read and record:
      1. Shut in drill pipe pressure and shut in casing pressure
      2. Pit gain
      3. Time
  - d. Regroup and identify forward plan

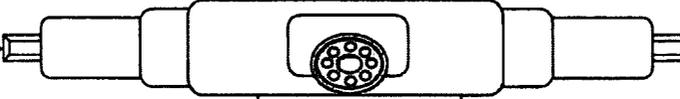
\*\* If annular is used to shut in well and pressure build to or is expected to get to 50% of RWP, confirm space-out and swap to upper VBRs for shut in.

Hydril "GK"  
13-5/8" 5M



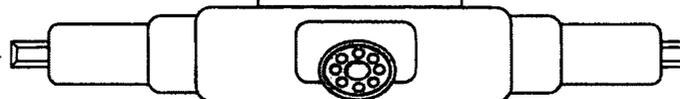
Hydril "GK"

Cameron Type U  
13-5/8" 10M

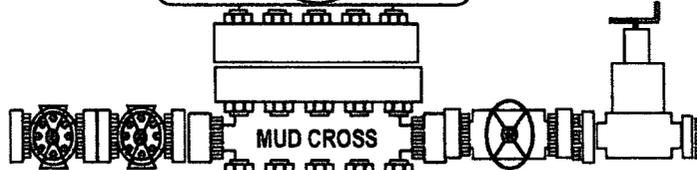


Variable Bore Rams

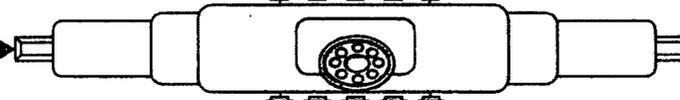
13-5/8" 10M



BLIND RAMS

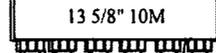


MUD CROSS

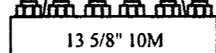


5" Fixed Rams

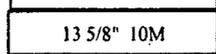
13 5/8" 10M



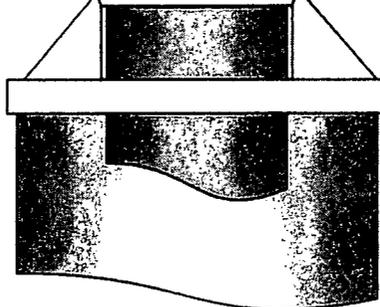
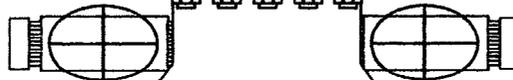
13 5/8" 10M



13 5/8" 10M



13 5/8" 10M



# Hydrogen Sulfide Drilling Operations Plan

Mesquite SWD, Inc.  
**Mel SWD #1**  
210' FNL & 210' FWL  
Section 23 – T25S – R32E  
Lea County, New Mexico

## 1. H2S Detection and Alarm Systems

A. H2S detectors and audio alarm system to be located at bell nipple, end of flow line (mud pit) and on derrick floor or doghouse.

## 2. Windsock and/or wind streamers

A. Windsock at mudpit area should be high enough to be visible.

B. Windsock at briefing area should be high enough to be visible.

## 3. Condition Flags and Signs

A. Warning sign on access road to location.

B. Flags to be displayed on sign at entrance to location. Green flag, normal safe condition.

Yellow flag indicates potential pressure and danger. Red flag, danger, H2S present in dangerous concentration. Only emergency personnel admitted to location.

## 4. Well control equipment

A. See "Pressure Control Equipment"

## 5. Communication

A. While working under masks chalkboards will be used for communication.

B. Hand signals will be used where chalk board is inappropriate.

C. Two way radio will be used to communicate off location in case emergency help is required.

In most cases cellular telephones will be available at most drilling foreman's trailer or living quarters.

## 6. Drillstem testing is not anticipated.

7. Drilling contractor supervisor will be required to be familiar with the effects H2S has on tubular goods and other mechanical equipment.

8. If H2S is encountered, mud system will be altered if necessary to maintain control of formation. A mud gas separator will be brought into service along with H2S scavengers if necessary

**Mesquite SWD, Inc.  
Deep Purple SWD #1  
1310' FSL & 1310' FWL  
Section 30, T22S, R32E  
Lea County, New Mexico**

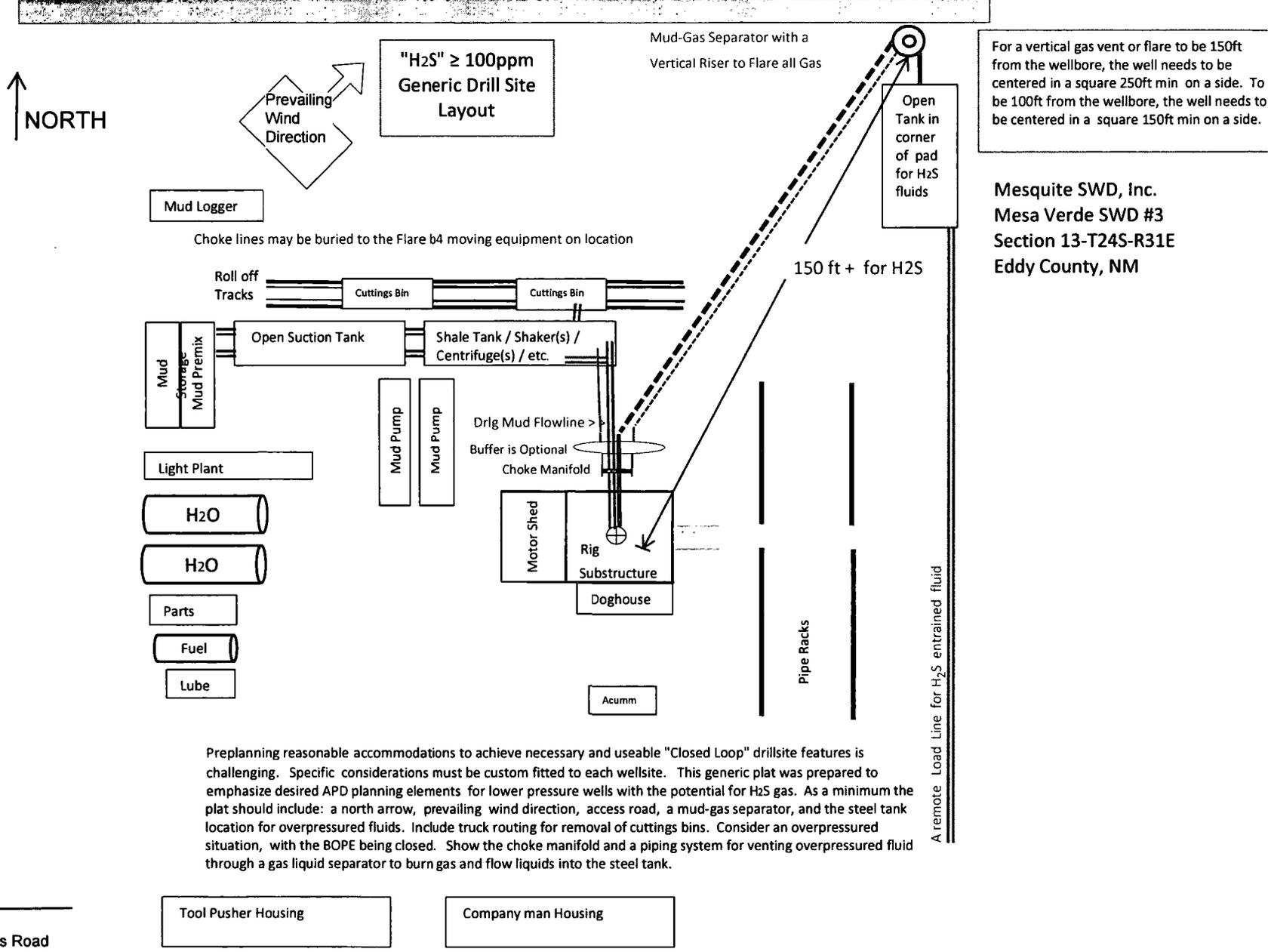
**Emergency Contact List**

Mesquite SWD, Inc.	575-706-1840
Clay Wilson	575-706-1840
Riley Neatherlin	575-706-7288
Kay Havenor	575-626-4518

**EMERGENCY RESPONSE NUMBERS**

State Police	575-748-9718
State Police Lea Co.	575-392-5588
Eddy County Sheriff	575-746-2701
Lea County Sheriff	575-396-3611
Emergency Medical Services	911 or 575-746-2701
Artesia Fire and Ambulance	575-746-5050
Maljamar Fire and Ambulance	575-674-4100
Artesia General Hospital 702 N. 13th St. Artesia	575-748-3333
Carlsbad Medical Center 2430 West Pierce Street	575-887-4100
Lea County Emergency Response	575-396-8602
Lea County Ambulance Eunice	911 or 575-396-8602
Carlsbad Police Department	575-885-2111
Eddy County Emergency Management	575-887-9511
Carlsbad Fire Department	575-885-3125

Note: squares are to represent approximately 07 ft x 07 ft areas



For a vertical gas vent or flare to be 150ft from the wellbore, the well needs to be centered in a square 250ft min on a side. To be 100ft from the wellbore, the well needs to be centered in a square 150ft min on a side.

Mesquite SWD, Inc.  
Mesa Verde SWD #3  
Section 13-T24S-R31E  
Eddy County, NM

Preplanning reasonable accommodations to achieve necessary and useable "Closed Loop" drillsite features is challenging. Specific considerations must be custom fitted to each wellsite. This generic plat was prepared to emphasize desired APD planning elements for lower pressure wells with the potential for H<sub>2</sub>S gas. As a minimum the plat should include: a north arrow, prevailing wind direction, access road, a mud-gas separator, and the steel tank location for overpressured fluids. Include truck routing for removal of cuttings bins. Consider an overpressured situation, with the BOPE being closed. Show the choke manifold and a piping system for venting overpressured fluid through a gas liquid separator to burn gas and flow liquids into the steel tank.



APD ID: 10400034740

Submission Date: 10/08/2018

Operator Name: MESQUITE SWD INCORPORATED

Highlighted data  
reflects the most  
recent changes

Well Name: MEL SWD

Well Number: 1

Show Final Text

Well Type: INJECTION - DISPOSAL

Well Work Type: Drill

### Section 1 - Existing Roads

Will existing roads be used? YES

Existing Road Map:

Mel\_SWD\_1\_Existing\_Rds\_Rev1\_20181218083405.pdf

Existing Road Purpose: ACCESS,FLUID TRANSPORT

Row(s) Exist? NO

ROW ID(s)

ID:

Do the existing roads need to be improved? NO

Existing Road Improvement Description:

Existing Road Improvement Attachment:

### Section 2 - New or Reconstructed Access Roads

Will new roads be needed? NO

### Section 3 - Location of Existing Wells

Existing Wells Map? YES

Attach Well map:

Mel\_SWD\_1\_1Mile\_Radius\_Rev1\_20181218083703.pdf

**Operator Name:** MESQUITE SWD INCORPORATED

**Well Name:** MEL SWD

**Well Number:** 1

**Existing Wells description:** A spreadsheet listing all wells within a one mile radius is attached.

### Section 4 - Location of Existing and/or Proposed Production Facilities

**Submit or defer a Proposed Production Facilities plan?** DEFER

**Estimated Production Facilities description:** Six 750 bbl fiberglass injection tanks, four 500 bbls steel oil tanks, injection pumps, two desanders, and two gun barrels. All produced water will be piped to facility.

### Section 5 - Location and Types of Water Supply

#### Water Source Table

**Water source use type:** INTERMEDIATE/PRODUCTION CASING

**Water source type:** OTHER

**Describe type:** Brine water

**Source latitude:**

**Source longitude:**

**Source datum:**

**Water source permit type:** PRIVATE CONTRACT

**Source land ownership:** PRIVATE

**Water source transport method:** TRUCKING

**Source transportation land ownership:** PRIVATE

**Water source volume (barrels):** 50000

**Source volume (acre-feet):** 6.444655

**Source volume (gal):** 2100000

**Water source use type:** OTHER, SURFACE CASING

**Water source type:** OTHER

**Describe type:**

**Source latitude:**

**Source longitude:**

**Source datum:**

**Water source permit type:** PRIVATE CONTRACT

**Source land ownership:** PRIVATE

**Water source transport method:** TRUCKING

**Source transportation land ownership:** PRIVATE

**Water source volume (barrels):** 2000

**Source volume (acre-feet):** 0.25778618

**Source volume (gal):** 84000

**Operator Name:** MESQUITE SWD INCORPORATED

**Well Name:** MEL SWD

**Well Number:** 1

**Water source use type:** SURFACE CASING

**Water source type:** OTHER

**Describe type:**

**Source latitude:**

**Source longitude:**

**Source datum:**

**Water source permit type:** PRIVATE CONTRACT

**Source land ownership:** PRIVATE

**Water source transport method:** TRUCKING

**Source transportation land ownership:** PRIVATE

**Water source volume (barrels):** 15000

**Source volume (acre-feet):** 1.9333965

**Source volume (gal):** 630000

**Water source and transportation map:**

MEL\_SWD\_1\_Wtr\_Source\_Map\_20181008132212.pdf

**Water source comments:**

**New water well?** NO

**New Water Well Info**

**Well latitude:**

**Well Longitude:**

**Well datum:**

**Well target aquifer:**

**Est. depth to top of aquifer(ft):**

**Est thickness of aquifer:**

**Aquifer comments:**

**Aquifer documentation:**

**Well depth (ft):**

**Well casing type:**

**Well casing outside diameter (in.):**

**Well casing inside diameter (in.):**

**New water well casing?**

**Used casing source:**

**Drilling method:**

**Drill material:**

**Grout material:**

**Grout depth:**

**Casing length (ft.):**

**Casing top depth (ft.):**

**Well Production type:**

**Completion Method:**

**Water well additional information:**

**State appropriation permit:**

**Additional information attachment:**

**Operator Name:** MESQUITE SWD INCORPORATED

**Well Name:** MEL SWD

**Well Number:** 1

### Section 6 - Construction Materials

**Construction Materials description:** On site caliche will be used for construction if sufficient. In the event insufficient quantities of caliche are available onsite, caliche will be trucked in from BLM's caliche pit in Section 1-T25S-R33E or BLM's caliche pit in Section 23-T25S-R33E.

**Construction Materials source location attachment:**

### Section 7 - Methods for Handling Waste

**Waste type:** DRILLING

**Waste content description:** Drilling fluids and cuttings

**Amount of waste:** 3900 barrels

**Waste disposal frequency :** One Time Only

**Safe containment description:** All drilling fluids will be stored safely and disposed of properly

**Safe containmant attachment:**

**Waste disposal type:** HAUL TO COMMERCIAL FACILITY      **Disposal location ownership:** PRIVATE

**Disposal type description:**

**Disposal location description:** Cuttings will be hauled to R360's facility on US 62/180 at Halfway, NM.

**Waste type:** SEWAGE

**Waste content description:** Human waste and grey water

**Amount of waste:** 1000 gallons

**Waste disposal frequency :** One Time Only

**Safe containment description:** Waste material will be stored safely and disposed of properly.

**Safe containmant attachment:**

**Waste disposal type:** HAUL TO COMMERCIAL FACILITY      **Disposal location ownership:** COMMERCIAL

**Disposal type description:**

**Disposal location description:** Trucked to an approved disposal facility.

**Waste type:** GARBAGE

**Waste content description:** Miscellaneous trash

**Amount of waste:** 500 pounds

**Waste disposal frequency :** One Time Only

**Safe containment description:** Trash produced during drilling and completion operations will be collected in a trash container and disposed of properly.

**Safe containmant attachment:**

**Waste disposal type:** HAUL TO COMMERCIAL FACILITY      **Disposal location ownership:** COMMERCIAL

**Operator Name:** MESQUITE SWD INCORPORATED

**Well Name:** MEL SWD

**Well Number:** 1

**Disposal type description:**

**Disposal location description:** Trucked to an approved disposal facility.

### Reserve Pit

**Reserve Pit being used?** NO

**Temporary disposal of produced water into reserve pit?**

**Reserve pit length (ft.)**

**Reserve pit width (ft.)**

**Reserve pit depth (ft.)**

**Reserve pit volume (cu. yd.)**

**Is at least 50% of the reserve pit in cut?**

**Reserve pit liner**

**Reserve pit liner specifications and installation description**

### Cuttings Area

**Cuttings Area being used?** NO

**Are you storing cuttings on location?** YES

**Description of cuttings location** Cuttings will be stored in roll off bins and hauled to R360 on US 62/180 near Halfway.

**Cuttings area length (ft.)**

**Cuttings area width (ft.)**

**Cuttings area depth (ft.)**

**Cuttings area volume (cu. yd.)**

**Is at least 50% of the cuttings area in cut?**

**WCuttings area liner**

**Cuttings area liner specifications and installation description**

### Section 8 - Ancillary Facilities

**Are you requesting any Ancillary Facilities?:** NO

**Ancillary Facilities attachment:**

**Comments:**

### Section 9 - Well Site Layout

**Well Site Layout Diagram:**

Mel\_SWD\_1\_Rig\_Layout\_20181005120050.pdf

Mel\_SWD\_1\_Well\_Site\_Layout\_Rev1\_20181218083737.pdf

**Operator Name:** MESQUITE SWD INCORPORATED

**Well Name:** MEL SWD

**Well Number:** 1

**Comments:**

### Section 10 - Plans for Surface Reclamation

**Type of disturbance:** New Surface Disturbance

**Multiple Well Pad Name:**

**Multiple Well Pad Number:**

**Recontouring attachment:**

**Drainage/Erosion control construction:** During construction proper erosion control methods will be used to control erosion, runoff and siltation of the surrounding area.

**Drainage/Erosion control reclamation:** Proper erosion control methods will be used on the area to control erosion, runoff and siltation of the surrounding area.

<b>Well pad proposed disturbance (acres):</b> 3.67	<b>Well pad interim reclamation (acres):</b> 0	<b>Well pad long term disturbance (acres):</b> 3.67
<b>Road proposed disturbance (acres):</b> 0.24	<b>Road interim reclamation (acres):</b> 0	<b>Road long term disturbance (acres):</b> 0
<b>Powerline proposed disturbance (acres):</b> 0	<b>Powerline interim reclamation (acres):</b> 0	<b>Powerline long term disturbance (acres):</b> 0
<b>Pipeline proposed disturbance (acres):</b> 0	<b>Pipeline interim reclamation (acres):</b> 0	<b>Pipeline long term disturbance (acres):</b> 0
<b>Other proposed disturbance (acres):</b> 0	<b>Other interim reclamation (acres):</b> 0	<b>Other long term disturbance (acres):</b> 0
<b>Total proposed disturbance:</b> 3.91	<b>Total interim reclamation:</b> 0	<b>Total long term disturbance:</b> 3.67

**Disturbance Comments:**

**Reconstruction method:** The areas planned for interim reclamation will then be recontoured to the original contour if feasible, or if not feasible, to an interim contour that blends with the surrounding topography as much as possible. Where applicable, the fill material of the well pad will be backfilled into the cut to bring the area back to the original contour. The interim cut and fill slopes prior to re-seeding will not be steeper than a 3:1 ratio, unless the adjacent native topography is steeper. Note: Constructed slopes may be much steeper during drilling, but will be recontoured to the above ratios during interim reclamation.

**Topsoil redistribution:** Topsoil will be evenly respread and aggressively revegetated over the entire disturbed area not needed for all-weather operations

**Soil treatment:** To seed the area, the proper BLM seed mixture, free of noxious weeds, will be used. Final seedbed preparation will consist of contour cultivating to a depth of 4 to 6 inches within 24 hours prior to seeding, dozer tracking, or other imprinting in order to break the soil crust and create seed germination micro-sites.

**Existing Vegetation at the well pad:** The historic climax plant community is a grassland dominated by black grama, dropseeds, and blue stems with sand sage and shinnery oak distributed evenly throughout. Current landscape displays mesquite, shinnery oak, yucca, desert sage, fourwing saltbush, snakeweed, and bunch grasses

**Existing Vegetation at the well pad attachment:**

**Existing Vegetation Community at the road:** Refer to "Existing Vegetation at the well pad"

**Existing Vegetation Community at the road attachment:**

**Existing Vegetation Community at the pipeline:** Refer to "Existing Vegetation at the well pad"

**Existing Vegetation Community at the pipeline attachment:**

**Operator Name:** MESQUITE SWD INCORPORATED

**Well Name:** MEL SWD

**Well Number:** 1

**Existing Vegetation Community at other disturbances:** Refer to "Existing Vegetation at the well pad"

**Existing Vegetation Community at other disturbances attachment:**

**Non native seed used?** NO

**Non native seed description:**

**Seedling transplant description:**

**Will seedlings be transplanted for this project?** NO

**Seedling transplant description attachment:**

**Will seed be harvested for use in site reclamation?** NO

**Seed harvest description:**

**Seed harvest description attachment:**

**Seed Management**

**Seed Table**

**Seed type:**

**Seed source:**

**Seed name:**

**Source name:**

**Source address:**

**Source phone:**

**Seed cultivar:**

**Seed use location:**

**PLS pounds per acre:**

**Proposed seeding season:**

**Seed Summary**

**Total pounds/Acre:**

**Seed Type**

**Pounds/Acre**

**Seed reclamation attachment:**

**Operator Contact/Responsible Official Contact Info**

**First Name:**

**Last Name:**

**Phone:**

**Email:**

**Seedbed prep:**

**Operator Name:** MESQUITE SWD INCORPORATED

**Well Name:** MEL SWD

**Well Number:** 1

**Seed BMP:**

**Seed method:**

**Existing invasive species?** NO

**Existing invasive species treatment description:**

**Existing invasive species treatment attachment:**

**Weed treatment plan description:** No invasive species present. Standard regular maintenance to maintain a clear location and road.

**Weed treatment plan attachment:**

**Monitoring plan description:** Identify areas supporting weeds prior to construction; prevent the introduction and spread of weeds from construction equipment during construction; and contain weed seeds and propagules by preventing segregated topsoil from being spread to adjacent areas. No invasive species present. Standard regular maintenance to maintain a clear location and road.

**Monitoring plan attachment:**

**Success standards:** To maintain all disturbed areas as per Gold Book standards

**Pit closure description:** N/A

**Pit closure attachment:**

## Section 11 - Surface Ownership

**Disturbance type:** WELL PAD

**Describe:**

**Surface Owner:** BUREAU OF LAND MANAGEMENT

**Other surface owner description:**

**BIA Local Office:**

**BOR Local Office:**

**COE Local Office:**

**DOD Local Office:**

**NPS Local Office:**

**State Local Office:**

**Military Local Office:**

**USFWS Local Office:**

**Other Local Office:**

**USFS Region:**

**USFS Forest/Grassland:**

**USFS Ranger District:**

**Operator Name:** MESQUITE SWD INCORPORATED

**Well Name:** MEL SWD

**Well Number:** 1

### Section 12 - Other Information

**Right of Way needed?** YES

**Use APD as ROW?** YES

**ROW Type(s):** 281001 ROW - ROADS,285003 ROW – POWER TRANS,288103 ROW – Salt Water Disposal Pipeline/Facility

### ROW Applications

**SUPO Additional Information:**

**Use a previously conducted onsite?** YES

**Previous Onsite information:** Onsite conducted September 12, 2018 with Riley Neatherlin (Mesquite), Will DeGrush (BLM) and Frank (Harcrow Surveying)

### Other SUPO Attachment

Mel\_SWD\_1\_Well\_Pad\_Layout\_20181005113432.pdf

Mel\_SWD\_1\_SUP\_20181008132700.pdf