

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0137
Expires: January 31, 2018

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.

5. Lease Serial No.
NMNM86024

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE - Other instructions on page 2

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

1. Type of Well

☐ Oil Well ☐ Gas Well ☒ Other: UNKNOWN OTH

8. Well Name and No.
CYPRESS SWD 1

2. Name of Operator

MESQUITE SWD INCORPORATED

Contact: MELANIE J WILSON

E-Mail: mjp1692@gmail.com

9. API Well No.
30-015-43867-00-X1

3a. Address

CARLSBAD, NM 88220

3b. Phone No. (include area code)
Ph: 575-914-1461

10. Field and Pool or Exploratory Area
SALT WATER DISPOSAL (SWD)

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

Sec 34 T23S R29E NWSW 1590FSL 165FWL

11. County or Parish, State

EDDY COUNTY, NM

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Hydraulic Fracturing	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	Change to Original APD
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.

Mesquite SWD, Inc. respectfully requests the following changes to the approved APD:

Accepted for record - NMOCD

Pressure Control

A 2M 13 5/8 inch BOP system will be installed and tested prior to drilling out the surface casing shoe. Diagrams of 2M BOP and Choke Manifold are attached.

A 10M BOP system will be installed and tested prior to drilling out the intermediate casing shoe.

Production Casing (Liner)

We propose to run a 7 5/8 inch 39# P-110 FJM liner from 9430-14780 ft. and cement with 380 sx 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. Density 14.2 Yield 1.33 Volume 505 cu.ft. 30% Excess

BLM OIL CONSERVATION
ARTESIA DISTRICT

MAR 08 2018

RECEIVED

14. I hereby certify that the foregoing is true and correct.

Electronic Submission #394106 verified by the BLM Well Information System

For MESQUITE SWD INCORPORATED, sent to the Carlsbad

Committed to AFMSS for processing by PRISCILLA PEREZ on 11/15/2017 (18PP0269SE)

Name (Printed/Typed) SHERYL BAKER

Title DRILLING SUPERINTENDENT

Signature (Electronic Submission)

Date 11/06/2017

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By ZOTA STEVENS

Title PETROLEUM ENGINEER

Date 03/06/2018

Conditions of approval, if any, are attached. Approval of this notice 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.

Office Carlsbad

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.

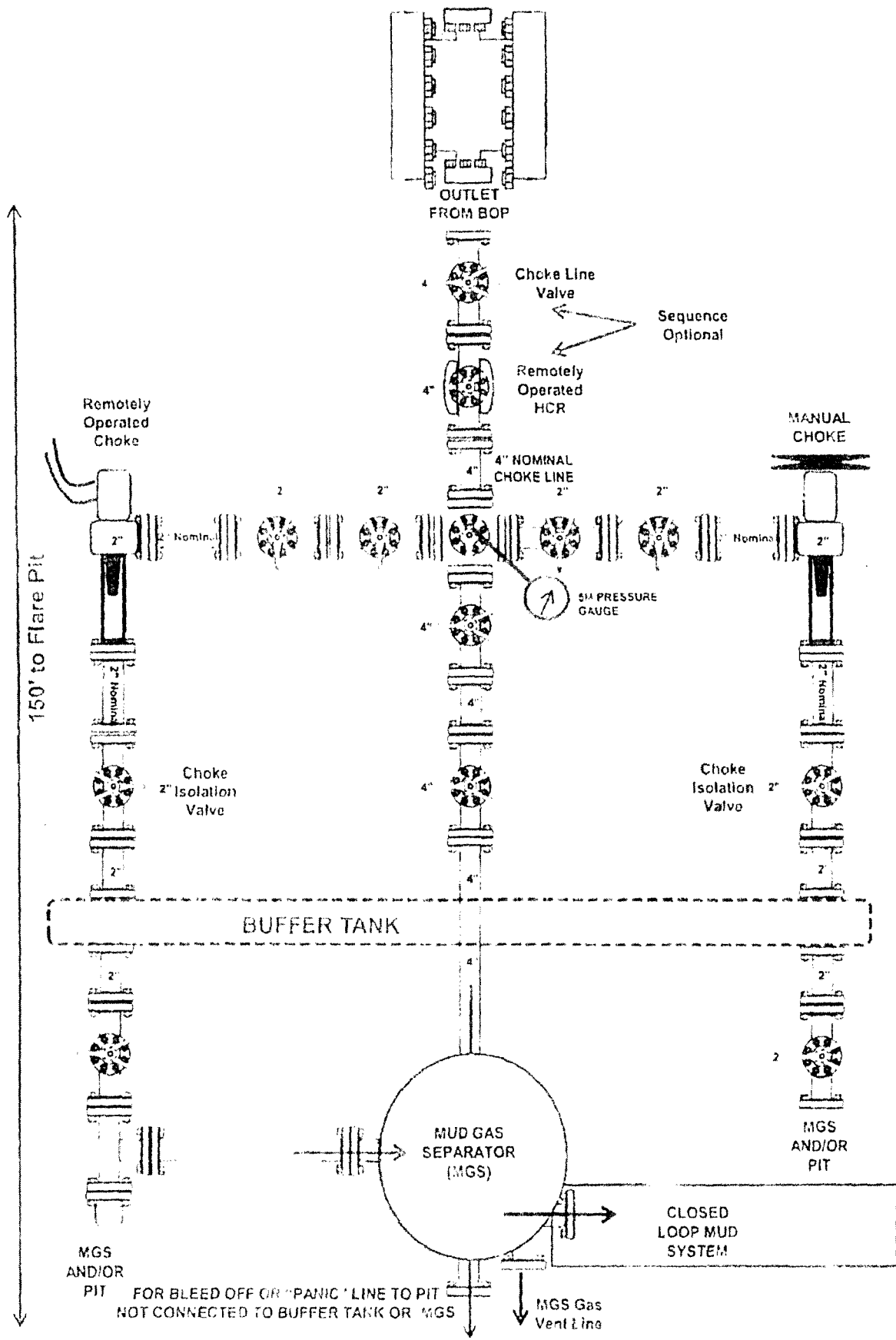
(Instructions on page 2)

**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****

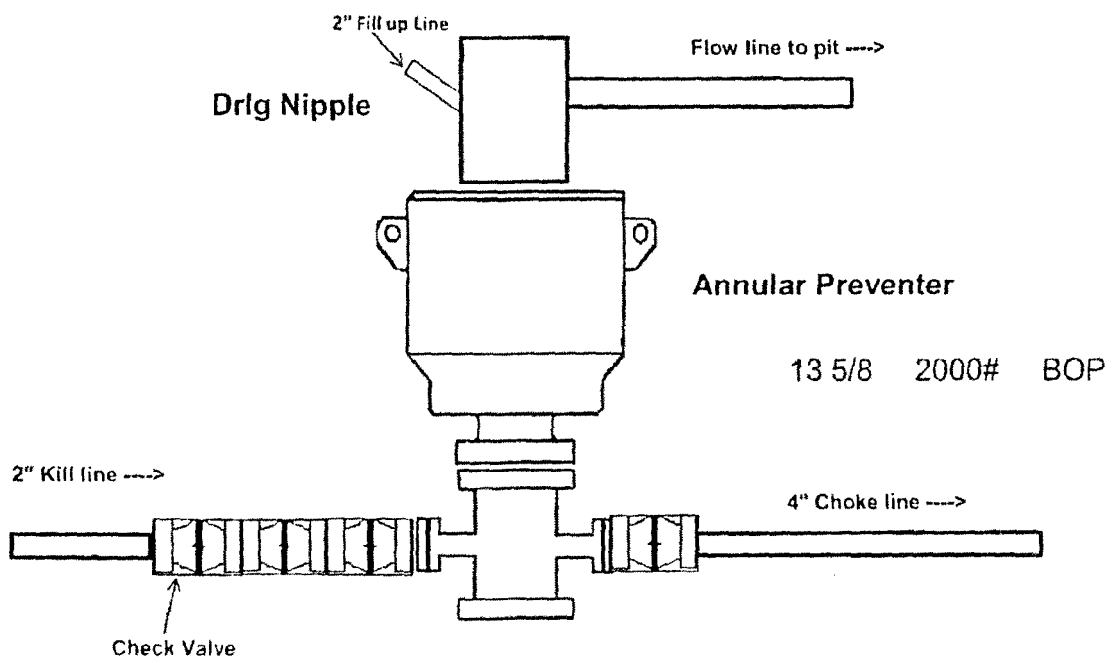
Additional data for EC transaction #394106 that would not fit on the form

32. Additional remarks, continued

2M Choke Manifold Equipment (WITH MGS + CLOSED LOOP)



2,000 psi BOP Schematic





U. S. Steel Tubular Products

10/6/2017 1:47:08 PM

7.625" 39.00lbs/ft (0.500" Wall) P110 HC USS-LIBERTY FJM®

MECHANICAL PROPERTIES

	Pipe	USS-LIBERTY FJM®	
Minimum Yield Strength	110,000	--	psi
Maximum Yield Strength	140,000	--	psi
Minimum Tensile Strength	125,000	--	psi

DIMENSIONS

	Pipe	USS-LIBERTY FJM®	
Outside Diameter	7.625	7.625	in.
Wall Thickness	0.500	--	in.
Inside Diameter	6.625	6.539	in.
Standard Drift	6.500	6.500	in.
Alternate Drift	--	--	in.
Nominal Linear Weight, T&C	39.00	--	lbs/ft
Plain End Weight	38.08	--	lbs/ft

SECTION AREA

	Pipe	USS-LIBERTY FJM®	
Critical Area	11.192	6.665	sq. in.
Joint Efficiency	--	59.5	%

PERFORMANCE

	Pipe	USS-LIBERTY FJM®	
Minimum Collapse Pressure	12,180	12,180	psi
External Pressure Leak Resistance	--	12,180	psi
Minimum Internal Yield Pressure	12,640	12,640	psi
Minimum Pipe Body Yield Strength	1,231,000	--	lbs
Joint Strength	--	733,000	lbs
Compression Rating	--	733,000	lbs
Reference Length	--	12,843	ft
Maximum Uniaxial Bend Rating	--	39.4	deg/100 ft

Make-Up Loss	--	4.75	in.
Minimum Make-Up Torque	--	14,700	ft-lbs
Maximum Make-Up Torque	--	20,750	ft-lbs

1. Other than proprietary collapse and connection values, performance properties have been calculated using standard equations defined by API 5C3 and do not incorporate any additional design or safety factors. Calculations assume nominal pipe OD, nominal wall thickness and Specified Minimum Yield Strength (SMYS).
2. Compressive & Tensile Connection Efficiencies are calculated by dividing the connection critical area by the pipe body area.
3. Uniaxial bending rating shown is structural only and equal to compression efficiency.
4. USS-LIBERTY FJM™ connections are optimized for each combination of OD and wall thickness and cannot be interchanged.
5. Torques have been calculated assuming a thread compound friction factor of 1.0 and are recommended only. Field make-up torques may require adjustment based on actual field conditions (e.g. make-up speed, temperature, thread compound, etc.).
6. Reference length is calculated by joint strength divided by nominal plain end weight with 1.5 safety factor.
7. Connection external pressure leak resistance has been verified to 100% API pipe body collapse pressure following the guidelines of API 5C5 Cal III.

Legal Notice

USS-LIBERTY FJM® is a trademark of U. S. Steel Corporation. All material contained in this publication is for general information only. This material should not therefore be used or relied upon for any specific application without independent competent professional examination and verification of accuracy, suitability and applicability. Anyone making use of this material does so at their own risk and assumes any and all liability resulting from such use. U.S. Steel disclaims any and all expressed or implied warranties of fitness for any general or particular application.

U. S. Steel Tubular Products
10343 Sam Houston Park Dr. #120
Houston, TX 77064

1-877-893-9461
connections@uss.com
www.usstubular.com

OPERATOR'S NAME:	MESQUITE SWD INC
LEASE NO.:	NM86024
WELL NAME & NO.:	1-Cypress SWD
SURFACE HOLE FOOTAGE:	1590'/S & 165'/W
BOTTOM HOLE FOOTAGE:	'/ & '/
LOCATION:	Section 34, T. 23 S., R. 29 E., NMPM
COUNTY:	Eddy County, New Mexico

All pervious COA still apply expect the following:

1. 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.

Formation below the 7 5/8" shoe to be tested according to Onshore Order 2.III.B.1.i. Test to be done as a mud equivalency test using the mud weight necessary for the pore pressure of the formation below the shoe and the mud weight for the bottom of the hole. Report results to BLM office.

A. 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. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the 20" 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 20" surface casing shoe shall be **10,000 (10M)** psi.
10M 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 (BOP Stack shall have triple rams & annular preventer).

ZS 030618

RIIIP High

20 Segment	surface csg in a #/ft	26 Grade	inch hole. Coupling	Joint	Design Factors		SURFACE		
"A"	106.50	J 55	ST&C	24.49	Collapse	Burst	Length	Weight	
"B"					4.6	1.49	350	37,275	
w/8.4#/g mud, 30min Sfc Csg Test psig: 1,500				Tail Cmt	does	circ to sfc.	Totals:	350 37,275	
<u>Comparison of Proposed to Minimum Required Cement Volumes</u>									
Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg
26	1.5053	840	1240	660	88	9.20	941	2M	2.50

13 3/8 Segment	casing inside the #/ft	20 Grade		Coupling	Body	Design Factors		INTERMEDIATE	
"A"	68.00	J 55		BUTT	5.09	Collapse	Burst	Length	Weight
"B"						1.2	0.66	3,090	210,120
w/8.4#/g mud, 30min Sfc Csg Test psig:							Totals:	3,090	210,120
The cement volume(s) are intended to achieve a top of					0	ft from surface or a		350	overlap.
Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg
17 1/2	0.6946	look ↘	0	2288		10.10	3025	5M	1.56
D V Tool(s):			1800				sum of sx	Σ CuFt	Σ % excess
t by stage % :		115	68				2201	4289	87

Burst Frac Gradient(s) for Segment(s): A, B, C, D = 1.12, b, c, d All > 0.70, OK. ALT BURST SF IS GOOD.

9 5/8 Segment	casing inside the #/ft	13 3/8 Grade	Coupling	Joint	Design Factors		PRODUCTION		
"A"	53.50	I 80	LT&C	1.97	Collapse	Burst	Length	Weight	
"B"					1.27	0.9	9,930	531,255	
							0	0	
w/8.4#/g mud, 30min Sfc Csg Test psig: 1,218							Totals:	9,930	531,255
The cement volume(s) are intended to achieve a top of					0	ft from surface or a		3090	overlap.
Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg
12 1/4	0.3132	look ✓	0	3196		10.10	5578	10M	0.81
Setting Depths for D V Tool(s):				6000	sum of sx		Σ CuFt	Σ % excess	
% excess cmt by stage		50	23			1898	4269	34	
MASP is within 10% of 5000psig, need exrta equip?									

Burst Frac Gradient(s) for Segment(s): A, B, C, D = 0.8, b, c, d All > 0.70, OK.

Tail cmt									
7 5/8	Liner w/top @	9430				<u>Design Factors</u>		LINER	
Segment	#/ft	Grade	Coupling	Joint	Collapse	Burst	Length	Weight	
"A"	39.00	P 110	#N/A	3.51	1.38	1.43	5,350	208,650	
"B"							0	0	
w/8.4#/g mud, 30min Sfc Csg Test psig: 3,252							Totals:	5,350	208,650
The cement volume(s) are intended to achieve a top of				9430	ft from surface or a		500	overlap.	
Hole	Annular	1 Stage	1 Stage	Min	1 Stage	Drilling	Calc	Req'd	Min Dist
Size	Volume	Cmt Sx	CuFt Cmt	Cu Ft	% Excess	Mud Wt	MASP	BOPE	Hole-Cplg
8 1/2	0.0770	380	505	392	29	11.50	3582	5M	0.44
Class 'H' tail cmt yld > 1.20				Capitan Reef est top XXXX.		MASP is within 10% of 5000psig, need exrta equip?			

Tail cmt					<u>Design Factors</u>		<u>PRODUCTION</u>	
7	casing inside the	7 5/8	—		Collapse	Burst	Length	Weight
Segment	#/ft	Grade	Coupling	Body				
"A"	35.00	HCL 80	LT&C		209.08	1.35	120	4,200
"B"	29.00	P 110	LT&C	1.81	1.51	1.64	12,110	351,190
"C"	35.00	HCL 80	LT&C	9.12	1.7	1.35	2,550	89,250
"D"							0	0
w/8.4#/g mud, 30min Sfc Csg Test psig: 3,252						Totals:	14,780	444,640
The cement volume(s) are intended to achieve a top of				0	ft from surface or a		14780	overlap.
Hole	Annular	1 Stage	1 Stage	Min	1 Stage	Drilling	Min Dist	
Size	Volume	Cmt Sx	CuFt Cmt	Cu Ft	% Excess	Mud Wt	Hole-Cplg	
8 1/2	0.1268	1214	2210		-648	8.90	0.42	