

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

**APPLICATION FOR PERMIT TO DRILL OR REENTER**

5a. Type of work: DRILL REENTER		5. Lease Serial No.
6a. Type of Well: Oil Well Gas Well Other Single Zone Multiple Zone		6. If Indian, Allottee or Tribe Name
7. Name of Operator [161968]		7. If Unit or CA Agreement, Name and No.
8a. Address		8. Lease Name and Well No. [319733]
8b. Phone No. (include area code)		9. API Well No. 30-025-44106
9. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface At proposed prod. zone		10. Field and Pool, or Exploratory -SILURIAN [97869]
10. Distance in miles and direction from nearest town or post office*		11. Sec., T. R. M. or Blk. and Survey or Area
11. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)		12. County or Parish
12. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.		13. State
13. Elevations (Show whether DF, KDB, RT, GL, etc.)		14. Spacing Unit dedicated to this well
14. Approximate date work will start*		15. BLM/BIA Bond No. on file
15. Estimated duration		16. No. of acres in lease
16. Proposed Depth		17. Spacing Unit dedicated to this well
17. Estimated duration		18. BLM/BIA Bond No. on file
18. Proposed Depth		19. Spacing Unit dedicated to this well
19. Estimated duration		20. BLM/BIA Bond No. on file
20. Proposed Depth		21. Spacing Unit dedicated to this well
21. Estimated duration		22. BLM/BIA Bond No. on file
22. Proposed Depth		23. Spacing Unit dedicated to this well
23. Estimated duration		24. BLM/BIA Bond No. on file

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**24. Attachments**

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, must be attached to this form:

- |  |   |
|--|---|
| 1. Well plat certified by a registered surveyor.   | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan.  | 5. Operator certification   |
| 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). | 6. Such other site specific information and/or plans as may be required by the BLM.             |

25. Signature	Name (Printed/Typed)	Date
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Title

Approved by (Signature)	Name (Printed/Typed)	Date
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Title

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.

(Continued on page 2)

**SWD-1681**

\*(Instructions on page 2)



Kz  
10/11/2017

30-025-44106

**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**Title:** Regulatory Analyst**Street Address:** 106 W. Riverside Drive**City:** Carlsbad**State:** NM**Signed on:** 06/20/2017**Phone:** (575)914-1461**Email address:** mjp1692@gmail.com**OCD - HOBBS  
10/11/2017  
RECEIVED****Zip:** 88220**Field Representative****Representative Name:** Riley Neatherlin**Street Address:** PO Box 1479**City:** Carlsbad**State:** NM**Zip:** 88220**Phone:** (575)702-7288**Email address:** rgneatherlin@gmail.com



APD ID: 10400015188

Submission Date: 06/20/2017

Highlighted data reflects the most recent changes

Operator Name: MESQUITE SWD INCORPORATED

Well Name: DEEP PURPLE SWD

Well Number: 1

[Show Final Text](#)

Well Type: INJECTION - DISPOSAL

Well Work Type: Drill

30-025-44106

## Section 1 - General

APD ID: 10400015188

Tie to previous NOS?

Submission Date: 06/20/2017

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: NMNM106915

Lease Acres: 339.84

Surface access agreement in place?

Allotted?

Reservation:

Agreement in place? NO

Federal or Indian agreement:

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Agreement number:

Agreement name:

Keep application confidential? NO

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

Mater Development Plan name:

Well in Master SUPO? NO

Master SUPO name:

Well in Master Drilling Plan? NO

Master Drilling Plan name:

Well Name: DEEP PURPLE 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? NATURAL GAS,OIL

Operator Name: MESQUITE SWD INCORPORATED

Well Name: DEEP PURPLE 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: 39 Miles

Distance to nearest well: 2100 FT

Distance to lease line: 1310 FT

Reservoir well spacing assigned acres Measurement: 0 Acres

Well plat: Deep\_Purple\_SWD\_1\_C102\_20171004155003.pdf

Well work start Date: 10/15/2017

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	270	FSL	380	FWL	22S	32E	30	Lot 4	32.355932	-103.7217	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 106915	3544	0	0
BHL Leg #1	270	FSL	380	FWL	22S	32E	30	Lot 4	32.355932	-103.7217	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 106915	-14591	18135	18135

<b>APD ID:</b> 10400015188	<b>30-025-44106</b>	<b>Submission Date:</b> 06/20/2017	Highlighted data reflects the most recent changes  Show Final Text
<b>Operator Name:</b> MESQUITE SWD INCORPORATED		<b>Well Number:</b> 1	
<b>Well Name:</b> DEEP PURPLE SWD		<b>Well Work Type:</b> Drill	
<b>Well Type:</b> INJECTION - DISPOSAL			

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## Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical Depth	Measured Depth	Lithologies	Mineral Resources	Producing Formation
1	UNKNOWN	3544	0	0		NONE	No
2	RUSTLER	2734	850	850		NONE	No
3	SALADO	2404	1180	1180		NONE	No
4	TOP SALT	1199	2385	2385		NONE	No
5	BASE OF SALT	-736	4320	4320		NONE	No
6	LAMAR	-1004	4588	4588		NATURAL GAS,OIL	No
7	BONE SPRING	-4916	8500	8500		NATURAL GAS,OIL	No
8	WOLFCAMP	-7581	11165	11165		NATURAL GAS,OIL	No
9	STRAWN	-9716	13300	13300		NATURAL GAS,OIL	No
10	MORROW	-10516	14100	14100		NATURAL GAS,OIL	No
11	MISSISSIPPIAN	-12316	15900	15900		NATURAL GAS,OIL	No
12	DEVONIAN	-13351	16935	16935		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.

**Operator Name:** MESQUITE SWD INCORPORATED

**Well Name:** DEEP PURPLE SWD

**Well Number:** 1

**Requesting Variance?** YES

**Variance request:** Flex hose variance

**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, before drilling out the 2nd intermediate shoe.

**Choke Diagram Attachment:**

Deep\_Purple\_SWD\_1\_Flex\_Hose\_Data\_06-17-2017.pdf

**BOP Diagram Attachment:**

Deep\_Purple\_SWD\_1\_10M\_BOP\_06-17-2017.pdf

Deep\_Purple\_SWD\_1\_2M\_3M\_BOP\_06-17-2017.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	850	0	850			850	K-55	133	BUTT	4.3	1.42	DRY	19.95	DRY	19.97
2	INTERMEDIATE	17.5	13.375	NEW	API	N	0	4510	0	4510			4510	HCP-110	68	BUTT	1.32	1.24	DRY	7.23	DRY	7.44
3	PRODUCTION	12.25	9.625	NEW	API	N	0	11650	0	11650			11650	P-110	53.5	BUTT	1.28	1.18	DRY	3.29	DRY	3.4
4	LINER	8.5	7.625	NEW	API	N	11415	16935	11415	16935			5520	OTHER	39	FJ	1.23	1.27	BUOY	4.01	BUOY	5.35

**Casing Attachments**

**Operator Name:** MESQUITE SWD INCORPORATED

**Well Name:** DEEP PURPLE SWD

**Well Number:** 1

### Casing Attachments

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

**Inspection Document:**

**Spec Document:**

**Tapered String Spec:**

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

Deep\_Purple\_SWD\_1\_Casing\_Program\_06-19-2017.pdf

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

**Inspection Document:**

**Spec Document:**

**Tapered String Spec:**

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

Deep\_Purple\_SWD\_1\_Casing\_Program\_06-19-2017.pdf

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

**Inspection Document:**

**Spec Document:**

**Tapered String Spec:**

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

Deep\_Purple\_SWD\_1\_Casing\_Program\_06-19-2017.pdf

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Operator Name: MESQUITE SWD INCORPORATED

Well Name: DEEP PURPLE 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):

Deep\_Purple\_SWD\_1\_Casing\_Program\_06-19-2017.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	850	1125	1.91	12.9	2149	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	850	200	1.34	14.8	268	100	Class C	2% PF1 Calcium
INTERMEDIATE	Lead		0	4510	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	4510	200	1.33	14.8	266	50	Class C	.3% PF13 Retarder
PRODUCTION	Lead		0	11650	1650	2.47	11.9	4076	30	Class H	50/50 Poz/H + 5% (BWOW) PF44 Salt + 10% PF20 Bentonite + .4% PF153 Antisettling Agent + .2% PF813 Retarder + 3 pps PF42 Kol-Seal + .4 pps PF45

**Operator Name:** MESQUITE SWD INCORPORATED

**Well Name:** DEEP PURPLE 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
											Defoamer
PRODUCTION	Tail		0	1165 0	400	1.19	15.6	476	30	Class H	.3% PF13 Retarder + .3% PF606 Fluid Loss + .4 pps PF45 Defoamer
LINER	Lead		1141 5	1693 5	380	1.33	14.2	505	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

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
0	850	SPUD MUD	8.4	9							

**Operator Name:** MESQUITE SWD INCORPORATED

**Well Name:** DEEP PURPLE 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
850	4510	SALT SATURATED	9.8	10.2							
4510	11650	SALT SATURATED	9	9.4							
11650	16935	SALT SATURATED	12	13.5							
16935	18135	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:** 4434.3

**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:**

Deep\_Purple\_SWD\_1\_H2S\_Plan\_06-17-2017.pdf

Deep\_Purple\_SWD\_1\_H2S\_Plan\_Rig\_Layout\_06-19-2017.pdf

**Operator Name:** MESQUITE SWD INCORPORATED

**Well Name:** DEEP PURPLE SWD

**Well Number:** 1

## Section 8 - Other Information

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

**Other proposed operations facets description:**

**Other proposed operations facets attachment:**

**Other Variance attachment:**

Mesquite SWD, Inc.  
 Deep Purple SWD #1  
 Flex Hose Data



Midwest Hose  
 & Specialty, Inc.

### Internal Hydrostatic Test Certificate

General Information		Hose Specifications	
Customer	PRECISION DRILLING	Hose Assembly Type	Choke & Kill
MWH Sales Representative	TYLER HILL	Certification	API 7K
Date Assembled	8/19/2014	Hose Grade	MUD
Location Assembled	OKC	Hose Working Pressure	10000
Sales Order #	268122	Hose Lot # and Date Code	7448-07/11
Customer Purchase Order #	245230	Hose I.D. (Inches)	3"
Assembly Serial # (Pick Ticket #)	268122-2	Hose O.D. (Inches)	5.36"
Hose Assembly Length	36'	Armor (yes/no)	YES
Fittings			
End A		End B	
Stem (Part and Revision #)	R3.0X64WB	Stem (Part and Revision #)	R3.0X64WB
Stem (Heat #)	MM141420	Stem (Heat #)	MM141420
Ferrule (Part and Revision #)	RF3.0	Ferrule (Part and Revision #)	RF3.0
Ferrule (Heat #)	J0965	Ferrule (Heat #)	J0965
Connection (Part #)	4 1/16 10K	Connection (Part #)	4 1/16 10K
Connection (Heat #)		Connection (Heat #)	
Dies Used	5.37"	Dies Used	5.45
Hydrostatic Test Requirements			
Test Pressure (psi)	15,000	Hose assembly was tested with ambient water temperature.	
Test Pressure Hold Time (minutes)	15 1/2		
Date Tested	8/19/2014	Tested By	Approved By
		<i>Charles Ash</i>	<i>Gene Adams</i>



Midwest Hose & Specialty, Inc.

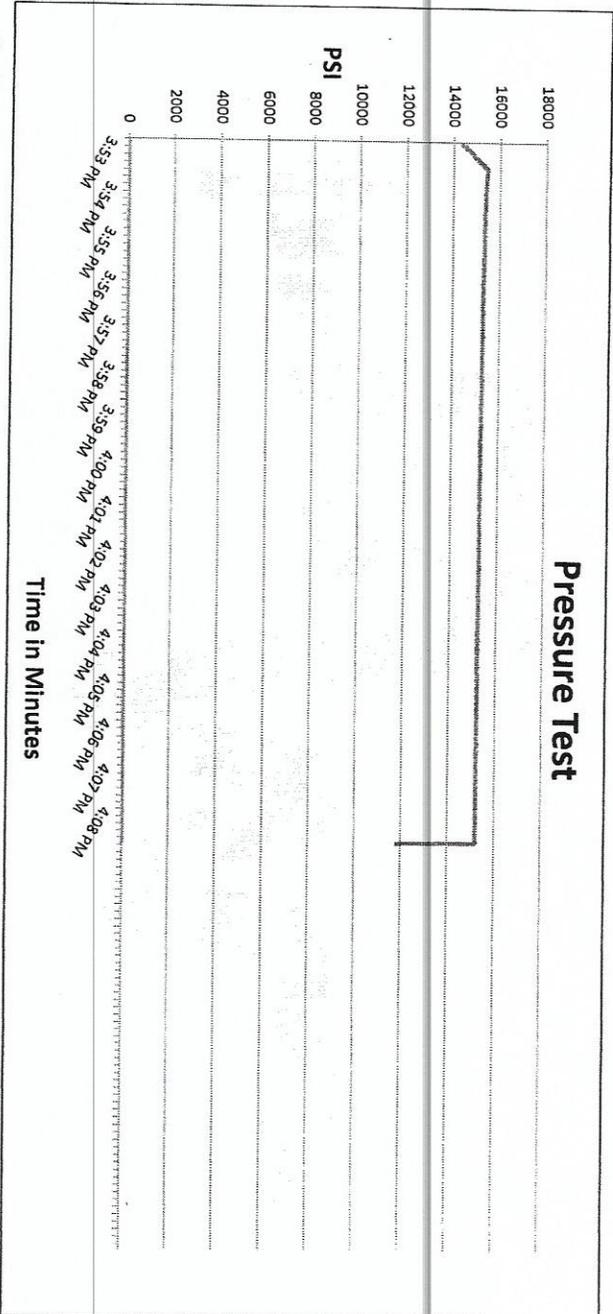
### Internal Hydrostatic Test Graph

August 19, 2014

Customer: Precision Drilling

Pick Ticket #: 268122

Hose Specifications		Verification	
Hose Type	CK	Length	36'
I.D.	3"	O.D.	4.79"
Working Pressure	10000 PSI	Type of Fitting	4 1/16 10K
		Die Size	5.37"
		Hose Serial #	7448
		Burst Pressure	Standard Safety Multiplier Applies
		Coupling Method	Swage
		Final O.D.	5.36"
		Hose Assembly Serial #	268122-2



Comments: Hose assembly pressure tested with water at ambient temperature.

Tested By: Charles Ash  
*Charles Ash*

Approved By: Ryan Adams  
*Ryan Adams*



Midwest Hose  
& Specialty, Inc.

### Certificate of Conformity

<i>Customer:</i> <b>PRECISION DRILLING</b>	<i>Customer P.O.#</i> <b>245230</b>
<i>Sales Order #</i> <b>268122</b>	<i>Date Assembled:</i> <b>8/19/2014</b>

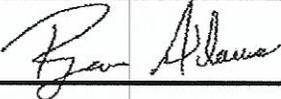
### Specifications

<i>Hose Assembly Type:</i> <b>Choke &amp; Kill</b>	
<i>Assembly Serial #</i> <b>268122-2</b>	<i>Hose Lot # and Date Code</i> <b>7448-07/11</b>
<i>Hose Working Pressure (psi)</i> <b>10000</b>	<i>Test Pressure (psi)</i> <b>15000</b>

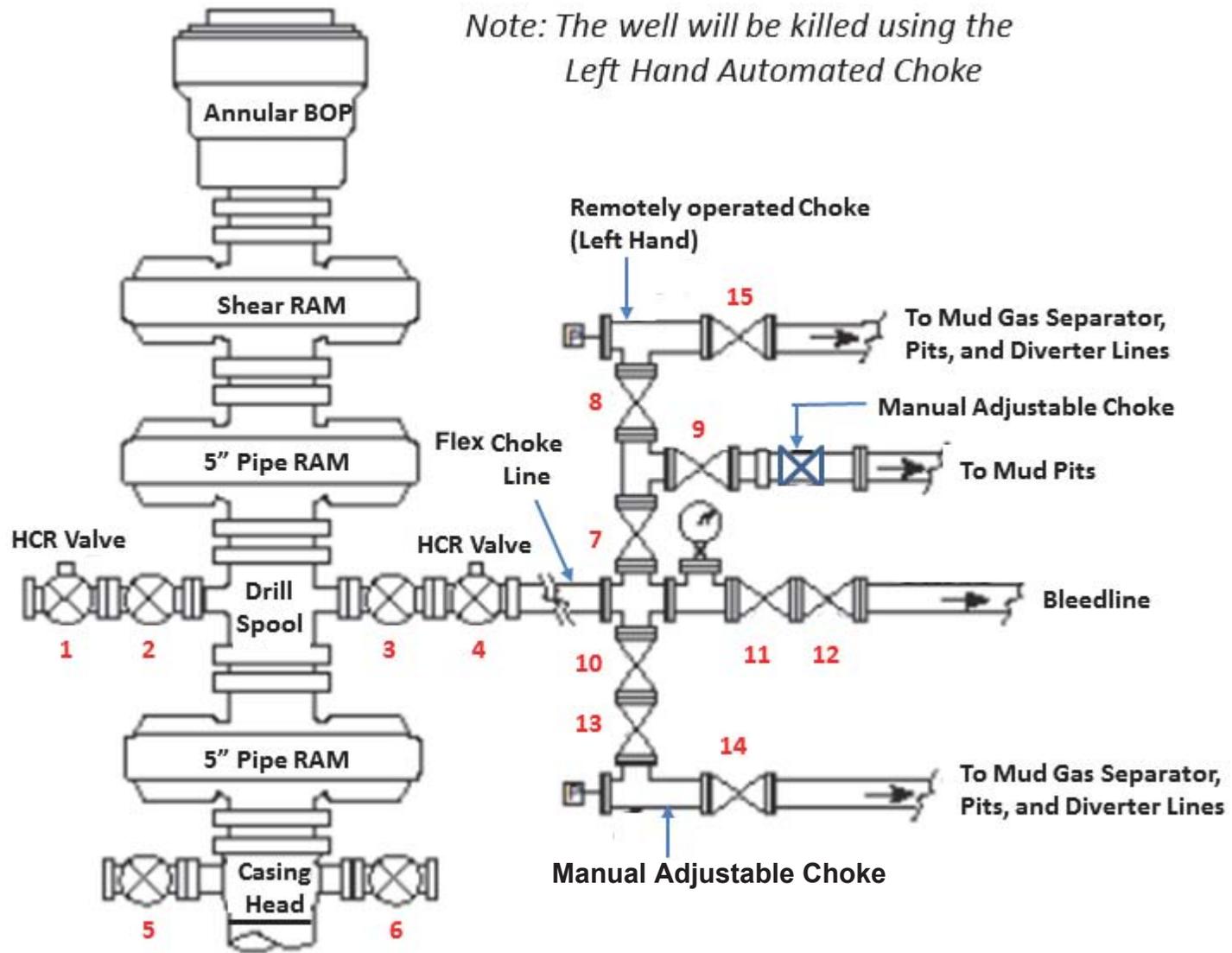
*We hereby certify that the above material supplied for the referenced purchase order to be true according to the requirements of the purchase order and current industry standards.*

*Supplier:*  
**Midwest Hose & Specialty, Inc.**  
**3312 S I-35 Service Rd**  
**Oklahoma City, OK 73129**

*Comments:*

<i>Approved By</i>	<i>Date</i>
	<b>8/20/2014</b>

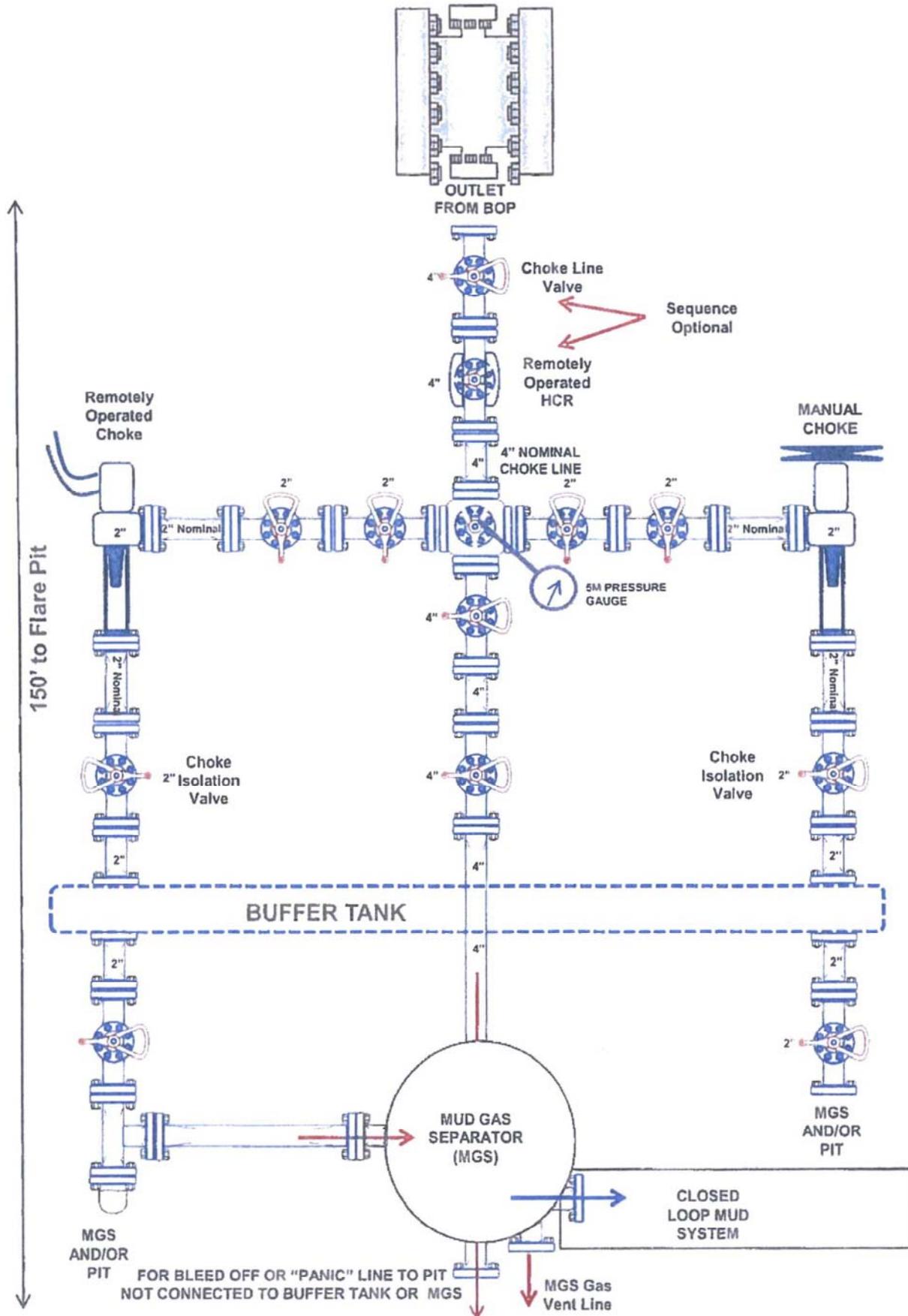
# 10M BOP/BOPE/Choke Diagram



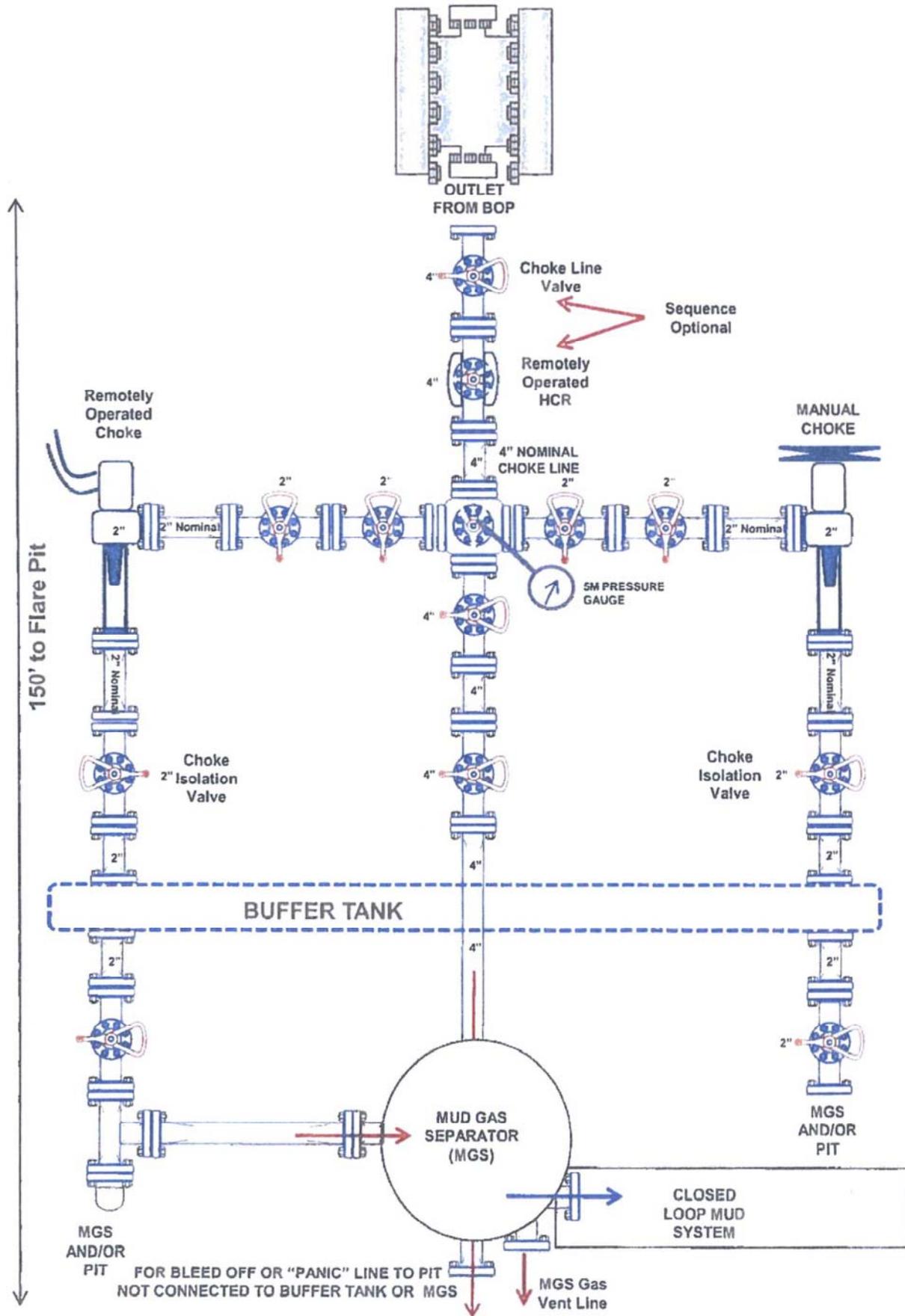
*Note: The well will be killed using the Left Hand Automated Choke*

**P** = Positive Closing Choke

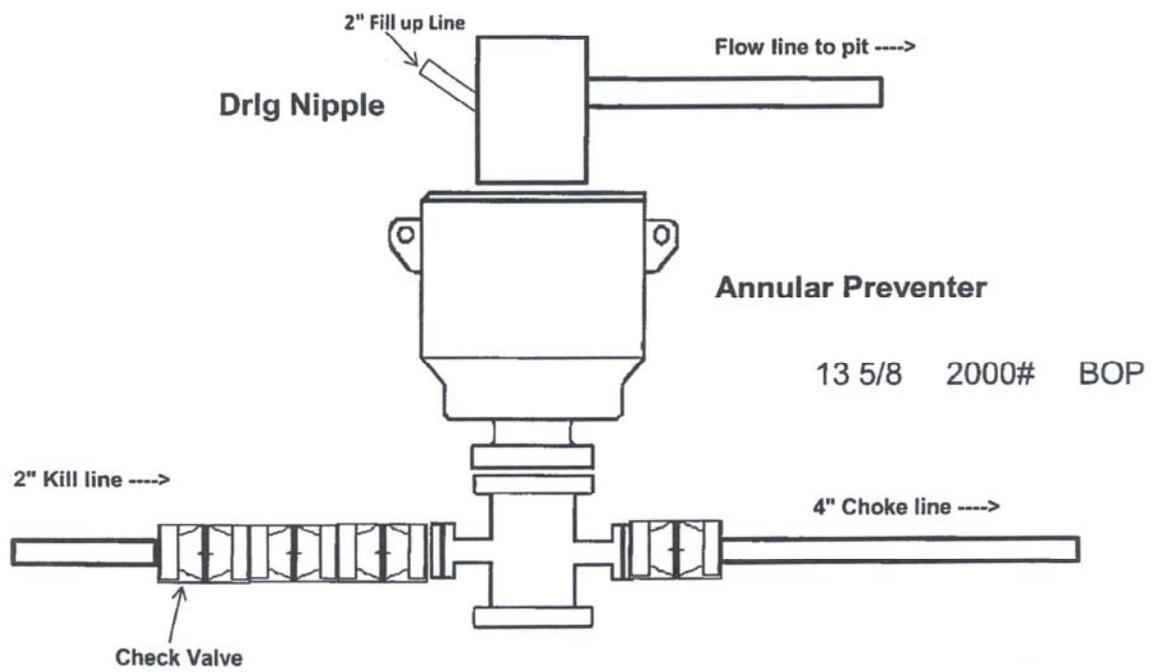
# 2M Choke Manifold Equipment (WITH MGS + CLOSED LOOP)



# 3M Choke Manifold Equipment (WITH MGS + CLOSED LOOP)



## 2,000 psi BOP Schematic



### 3.000 psi BOP Schematic

