Form 3160-3
(March 2012)

FORM APPROVED
OMB No. 1004-0137
Expires October 31, 2014

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

HOBBS OCD
JAN 03 2018
RECEIVED

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: ☑ DRILL ☐ REENTER	5. Lease Serial No. NMLC065607
	6. If Indian, Allotee or Tribe Name
	7. If Unit or CA Agreement, Name and No.
1b. Type of Well: ☑ Oil Well ☐ Gas Well ☐ Other ☑ Single Zone ☐ Multiple Zone	8. Lease Name and Well No. 320545 VERNA RAE FEDERAL COM 134H
2. Name of Operator MATADOR PRODUCTION COMPANY 228937	9. API Well No. 30-025-44342
3a. Address 5400 LBJ Freeway, Suite 1500 Dallas TX 752 / 3b. Phone No. (include area code) (972)371-5200	10. Field and Pool, or Exploratory 96637 TEAS BONE SPRINGS EAST / TEAS BC
4. Location of Well (Report location clearly and in accordance with any State requirements.*) At surface LOT 2 / 260 FNL / 1725 FEL / LAT 32.6086813 / LONG -103.5965036 At proposed prod. zone SESE / 240 FSL / 660 FEL / LAT 32.5955659 / LONG -103.5931409	11. Sec., T. R. M. or Blk. and Survey or Area SEC 6 / T20S / R34E / NMP
14. Distance in miles and direction from nearest town or post office* 19 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) 260 feet	16. No. of acres in lease 722.39	17. Spacing Unit dedicated to this well 160
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 42 feet	19. Proposed Depth 10785 feet / 15618 feet	20. BLM/BIA Bond No. on file FED: NMB001079
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3620 feet	22. Approximate date work will start* 09/01/2017	23. Estimated duration 90 days

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.
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 required by the BLM.

25. Signature (Electronic Submission)	Name (Printed/Typed) Brian Wood / Ph: (505)466-8120	Date 06/16/2017
Title President		
Approved by (Signature) (Electronic Submission)	Name (Printed/Typed) Bobby Ballard / Ph: (575)234-2235	Date 12/21/2017
Title Natural Resource Specialist	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.

(Continued on page 2)

*(Instructions on page 2)

APPROVED WITH CONDITIONS

Approval Date: 12/21/2017

KZ 01/09/18

INSTRUCTIONS

GENERAL: This form is designed for submitting proposals to perform certain well operations, as indicated on Federal and Indian lands and leases for action by appropriate Federal agencies, pursuant to applicable Federal laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from local Federal offices.

ITEM 1: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable Federal regulations concerning subsequent work proposals or reports on the well.

ITEM 4: Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local Federal offices for specific instructions.

ITEM 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on the reverse side, showing the roads to, and the surveyed location of, the well, and any other required information, should be furnished when required by Federal agency offices.

ITEMS 15 AND 18: If well is to be, or has been directionally drilled, give distances for subsurface location of hole in any present or objective productive zone.

ITEM 22: Consult applicable Federal regulations, or appropriate officials, concerning approval of the proposal before operations are started.

NOTICES

The Privacy Act of 1974 and regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.
AUTHORITY: 30 U.S.C. 181 et seq., 25 U.S.C. 396; 43 CFR 3160
PRINCIPAL PURPOSES: The information will be used to: (1) process and evaluate your application for a permit to drill a new oil, gas, or service well or to reenter a plugged and abandoned well; and (2) document, for administrative use, information for the management, disposal and use of National Resource Lands and resources including (a) analyzing your proposal to discover and extract the Federal or Indian resources encountered; (b) reviewing procedures and equipment and the projected impact on the land involved; and (c) evaluating the effects of the proposed operation on the surface and subsurface water and other environmental impacts.
ROUTINE USE: Information from the record and/or the record will be transferred to appropriate Federal, State, and local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecution, in connection with congressional inquiries and for regulatory responsibilities.
EFFECT OF NOT PROVIDING INFORMATION: Filing of this application and disclosure of the information is mandatory only if you elect to initiate a drilling or reentry operation on an oil and gas lease.

The Paperwork Reduction Act of 1995 requires us to inform you that:
The BLM collects this information to allow evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases. This information will be used to analyze and approve applications. Response to this request is mandatory only if the operator elects to initiate drilling or reentry operations on an oil and gas lease. The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C Street, N.W., Mail Stop 401 LS, Washington, D.C. 20240.

(Continued on page 3)

Approval Date: 12/21/2017

Additional Operator Remarks

Location of Well

1. SHL: LOT 2 / 260 FNL / 1725 FEL / TWSP: 20S / RANGE: 34E / SECTION: 6 / LAT: 32.6086813 / LONG: -103.5965036 (TVD: 0 feet, MD: 0 feet)
   PPP: SENE / 2640 FNL / 660 FEL / TWSP: 20S / RANGE: 34E / SECTION: 6 / LAT: 32.60215 / LONG: -103.59308 (TVD: 10785 feet, MD: 13222 feet)
   PPP: LOT 2 / 260 FNL / 1725 FEL / TWSP: 20S / RANGE: 34E / SECTION: 6 / LAT: 32.6086813 / LONG: -103.5965036 (TVD: 0 feet, MD: 0 feet)
   BHL: SESE / 240 FSL / 660 FEL / TWSP: 20S / RANGE: 34E / SECTION: 6 / LAT: 32.5955659 / LONG: -103.5931409 (TVD: 10785 feet, MD: 15618 feet)

BLM Point of Contact

Name: Sipra Dahal
Title: Legal Instruments Examiner
Phone: 5752345983
Email: sdahal@blm.gov

Approval Date: 12/21/2017

Review and Appeal Rights

A person contesting a decision shall request a State Director review. This request must be filed within 20 working days of receipt of the Notice with the appropriate State Director (see 43 CFR 3165.3). The State Director review decision may be appealed to the Interior Board of Land Appeals, 801 North Quincy Street, Suite 300, Arlington, VA 22203 (see 43 CFR 3165.4). Contact the above listed Bureau of Land Management office for further information.

AFMSS

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

Application Data Report

12/21/2017

APD ID: 10400015169 **Submission Date:** 06/16/2017

Operator Name: MATADOR PRODUCTION COMPANY

Well Name: VERNA RAE FEDERAL COM **Well Number:** 134H

Well Type: OIL WELL **Well Work Type:** Drill

Highlighted data reflects the most recent changes

Show Final Text

Section 1 - General

APD ID: 10400015169 **Tie to previous NOS?** **Submission Date:** 06/16/2017

BLM Office: CARLSBAD **User:** Brian Wood **Title:** President

Federal/Indian APD: FED **Is the first lease penetrated for production Federal or Indian?** FED

Lease number: NMLC065607 **Lease Acres:** 722.39

Surface access agreement in place? **Allotted?** **Reservation:**

Agreement in place? NO **Federal or Indian agreement:**

Agreement number:

Agreement name:

Keep application confidential? NO

Permitting Agent? YES **APD Operator:** MATADOR PRODUCTION COMPANY

Operator letter of designation:

Operator Info

Operator Organization Name: MATADOR PRODUCTION COMPANY

Operator Address: 5400 LBJ Freeway, Suite 1500 **Zip:** 75240

Operator PO Box:

Operator City: Dallas **State:** TX

Operator Phone: (972)371-5200

Operator Internet Address: amonroe@matadorresources.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: VERNA RAE FEDERAL COM **Well Number:** 134H **Well API Number:**

Field/Pool or Exploratory? Field and Pool **Field Name:** TEAS BONE SPRINGS EAST **Pool Name:** TEAS BONE SPRING EAST

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

Operator Name: MATADOR PRODUCTION COMPANY

Well Name: VERNA RAE FEDERAL COM **Well Number:** 134H

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: MULTIPLE WELL **Multiple Well Pad Name:** VERNA RAE **Number:** SLOT 3

Well Class: HORIZONTAL **Number of Legs:** 1

Well Work Type: Drill

Well Type: OIL WELL

Describe Well Type:

Well sub-Type: INFILL

Describe sub-type:

Distance to town: 19 Miles **Distance to nearest well:** 42 FT **Distance to lease line:** 260 FT

Reservoir well spacing assigned acres Measurement: 160 Acres

Well plat: VernaRae_134H_Plat_20171005100432.PDF

Well work start Date: 09/01/2017 **Duration:** 90 DAYS

Section 3 - Well Location Table

Survey Type: RECTANGULAR

Describe Survey Type:

Datum: NAD83 **Vertical Datum:** NAVD88

Survey number: 18329

	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	260	FNL	1725	FEL	20S	34E	6	Lot 2	32.6086813	-103.5965036	LEA	NEW MEXICO	NEW MEXICO	F	NMLC065607	3620	0	0
KOP Leg #1	260	FNL	1725	FEL	20S	34E	6	Lot 2	32.6086813	-103.5965036	LEA	NEW MEXICO	NEW MEXICO	F	NMLC065607	-6625	10350	10245
PPP Leg #1	260	FNL	1725	FEL	20S	34E	6	Lot 2	32.6086813	-103.5965036	LEA	NEW MEXICO	NEW MEXICO	F	NMLC065607	3620	0	0

Operator Name: MATADOR PRODUCTION COMPANY

Well Name: VERNA RAE FEDERAL COM **Well Number:** 134H

	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
PPP Leg #1	2640	FNL	660	FEL	20S	34E	6	Aliquot SENE	32.60215	-103.59308	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 40406	-7165	13222	10785
EXIT Leg #1	240	FSL	660	FEL	20S	34E	6	Aliquot SESE	32.5955659	-103.5931409	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 40406	-7165	15618	10785
BHL Leg #1	240	FSL	660	FEL	20S	34E	6	Aliquot SESE	32.5955659	-103.5931409	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 40406	-7165	15618	10785

APD ID: 10400015169 **Submission Date:** 06/16/2017

Operator Name: MATADOR PRODUCTION COMPANY

Well Name: VERNA RAE FEDERAL COM **Well Number:** 134H

Well Type: OIL WELL **Well Work Type:** Drill

Highlighted data reflects the most recent changes

Show Final Text

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical Depth	Measured Depth	Lithologies	Mineral Resources	Producing Formation
1	---	3620	0	0	OTHER : Quaternary	USEABLE WATER	No
2	RUSTLER ANHYDRITE	2149	1475	1479	ANHYDRITE	OTHER : Anhydrite	No
3	TOP SALT	2019	1605	1610	SALT	OTHER : Salt	No
4	BASE OF SALT	500	3120	3158	SALT	OTHER : Salt	No
5	TANSILL	435	3185	3224	SANDSTONE	OTHER : Sandstone	No
6	YATES	280	3340	3383	GYPSUM	OTHER : Gypsum	No
7	SEVEN RIVERS	-130	3750	3802	DOLOMITE	NONE	No
8	QUEEN	-950	4570	4610	SANDSTONE	OTHER : Sandstone	No
9	CAPITAN REEF	-1130	4750	4824	OTHER : Carbonate	USEABLE WATER	No
10	DELAWARE SAND	-1800	5420	5510	SANDSTONE	NATURAL GAS,CO2,OIL	No
11	BRUSHY CANYON	-2535	6155	6258	SANDSTONE	NATURAL GAS,CO2,OIL	No
12	BONE SPRING LIME	-4660	8280	8395		NATURAL GAS,CO2,OIL	No
13	BONE SPRING 1ST	-5385	9005	9110	OTHER : Carbonate	NATURAL GAS,CO2,OIL	No
14	BONE SPRING 1ST	-5770	9390	9495	SANDSTONE	NATURAL GAS,CO2,OIL	No
15	BONE SPRING 2ND	-6310	9930	10035	SANDSTONE	NATURAL GAS,CO2,OIL	No
16	BONE SPRING 3RD	-6985	10605	10750	SANDSTONE	NATURAL GAS,CO2,OIL	Yes

Section 2 - Blowout Prevention

Operator Name: MATADOR PRODUCTION COMPANY

Well Name: VERNA RAE FEDERAL COM **Well Number:** 134H

Pressure Rating (PSI): 5M **Rating Depth:** 10000

Equipment: An accumulator complying with Onshore Order 2 requirements for the BOP stack pressure rating will be present. Rotating head will be installed as needed.

Requesting Variance? YES

Variance request: Matador requests a variance to drill this well using a co-flex line between the BOP and choke manifold. Certification for proposed co-flex hose is attached. Manufacturer does not require the hose to be anchored. If the specific hose is not available, then one of equal or higher rating will be used. Matador is requesting a variance to use a speed head. Speed head diameter range is 13.375" x 9.625" x 5.5" x 2.875". Matador requested a variance per discussion with Chris Walls to use attached Choke diagram.

Testing Procedure: A third party company will test the BOPs. Surface casing will be pressure tested to 250 psi low and 2000 psi high. Intermediate casing pressure tests will be made to 250 psi low and 3000 psi high. Annular preventer will be tested to 250 psi low and 2500 psi high on the surface casing and tested to 250 psi low and 2500 psi high on the intermediate casing. In the case of running a speed head with landing mandrel for 9.625" casing, initial surface casing test pressures will be 250 psi low and 3000 psi high, with wellhead seals tested to 5000 psi once the 9.625" casing has been landed and cemented.

Choke Diagram Attachment:

VernaRae_134H_Choke_20171023102718.pdf

BOP Diagram Attachment:

VernaRae_134H_BOP_06-15-2017.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	20	13.375	NEW	API	N	0	1600	0	1600	-7165	-8765	1600	J-55	54.5	OTHER - BTC	1.125	1.125	DRY	1.8	DRY	1.8
2	INTERMEDIATE	12.25	9.625	NEW	API	N	0	5400	0	5392	-7165	-12557	5400	J-55	40	OTHER - BTC	1.125	1.125	DRY	1.8	DRY	1.8
3	PRODUCTION	8.75	5.5	NEW	API	N	0	14982	0	10335	-7165	-17500	14982	P-110	20	OTHER - DWC/C	1.125	1.125	DRY	1.8	DRY	1.8

Casing Attachments

Operator Name: MATADOR PRODUCTION COMPANY

Well Name: VERNA RAE FEDERAL COM **Well Number:** 134H

Casing Attachments

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

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Casing_Design_Assumptions_Surface_06-15-2017.docx

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

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Casing_Design_Assumptions_Intermediate_06-15-2017.docx

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

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Casing_Design_Assumptions_Production_06-15-2017.docx

Section 4 - Cement

Operator Name: MATADOR PRODUCTION COMPANY

Well Name: VERNA RAE FEDERAL COM **Well Number:** 134H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	1600	1764	1.75	13.5	3087	100	Class C	3% NaCl + LCM
SURFACE	Tail		0	1600	559	1.38	14.8	771	100	Class C	5% NaCl + LCM
INTERMEDIATE	Lead		0	5400	1262	1.81	13.5	2284	100	Class C	Bentonite + 1% CaCl2 + 8% NaCl + LCM
INTERMEDIATE	Tail		0	5400	490	1.38	14.8	676	100	Class C	5% NaCl + LCM
PRODUCTION	Lead		0	15618	730	2.25	11.5	1642	35	TXI	Fluid Loss + Dispersant + Retarder + LCM
PRODUCTION	Tail		0	15618	1511	1.38	13.2	2085	35	TXI	Fluid Loss + Dispersant + Retarder + LCM

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: All necessary mud products (barite, bentonite, LCM) for weight addition and fluid loss control will be on location at all times.

Describe the mud monitoring system utilized: An electronic Pason mud monitoring system complying with Onshore Order 1 will be used. Mud program is subject to change due to hole conditions. A closed loop system will be used.

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	1600	SPUD MUD	8.4	8.4							
5400	15618	OTHER : Fresh water & cut brine	9	9							
1600	5400	SALT SATURATED	10	10							

Operator Name: MATADOR PRODUCTION COMPANY

Well Name: VERNA RAE FEDERAL COM **Well Number:** 134H

Section 6 - Test, Logging, Coring

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

A 2-person mud logging program will be used from 1600' to TD.

No electric logs are planned at this time. GR will be collected through the MWD tools from intermediate casing to TD. CBL with CCL will be run as far as gravity will let it fall to TOC.

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

CBL,GR,MWD,OTH

Other log type(s):

Casing collar locator

Coring operation description for the well:

No core or drill stem test is planned.

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 5385 **Anticipated Surface Pressure:** 5385

Anticipated Bottom Hole Temperature(F): 150

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

Describe:

Contingency Plans geoharzards description:

Contingency Plans geohazards attachment:

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations plan:

VernaRae_134H_H2S_Plan_06-15-2017.pdf

Operator Name: MATADOR PRODUCTION COMPANY

Well Name: VERNA RAE FEDERAL COM **Well Number:** 134H

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

VernaRae_134H_Horizontal_Drilling_Plan_06-15-2017.pdf

Other proposed operations facets description:

Deficiency Letter dated 10/20/17 requested:
1) Revised Choke Diagram - see attached;
2) 5.5 in Casing Specs - original Wellhead Casing Spec attachment is correct, so no deficiency

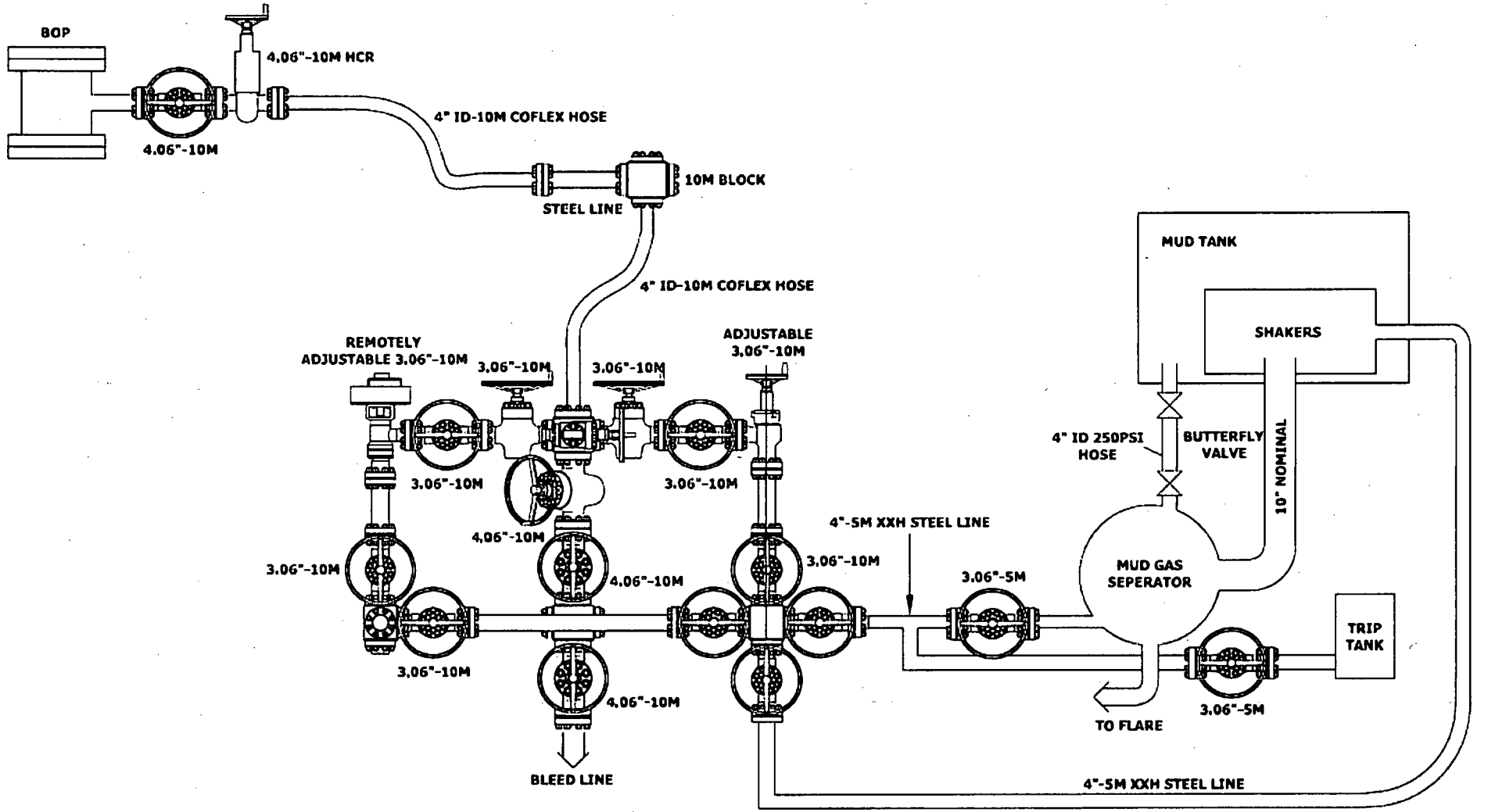
Other proposed operations facets attachment:

VernaRae_134H_General_Drill_Plan_06-15-2017.pdf

VernaRae_134H_Wellhead_Casing_Spec_20171005100354.pdf

Other Variance attachment:

VernaRae_134H_DV_Tool_Variance_Request_20171006091042.pdf



WELDING NOTE & TOLERANCES UNLESS OTHERWISE SPECIFIED.

GENERAL WELDING NOTE:
ALL ACCESSIBLE CONTACT SURFACES SHALL BE JOINED WITH CONTINUOUS 45 DEGREE, FILLET WELDS, WELD SIZE TO BE 1/16 INCH SMALLER THAN THINNER MEMBER JOINED UP TO 3/16 INCH THICKNESS AND 1/8 INCH SMALLER THAN THINNER MEMBER JOINED UP TO 3/4 INCH THICKNESS WELD SIZE TO BE AS NOTED.

MACHINING TOLERANCES:
1 PLACE DECIMAL ± .1
2 PLACE DECIMAL ± .01
3 PLACE DECIMAL ± .010
FRACTIONAL TOLERANCE ± 1/64
HEIDE MACHINED CORNER RADII ± .01
CHAMFER OUTSIDE CORNERS .03 X 45 DEG
ANGLE TOLERANCE ± 1 DEGREE
MACHINED SURFACE FINISH 125 RMS
ALL UNSPECIFIED DIMENSIONS ARE IN INCHES

REV	DATE	DESCRIPTION	DRAWN BY	CHK BY	APPVD ENG.
02	6-5-13	ISSUED FOR INFORMATION	CP	CSL	
01	4-9-13	ISSUED FOR INFORMATION	CSL		

PATTERSON-UTI
DRILLING COMPANY LLC

CHOKE MANIFOLD

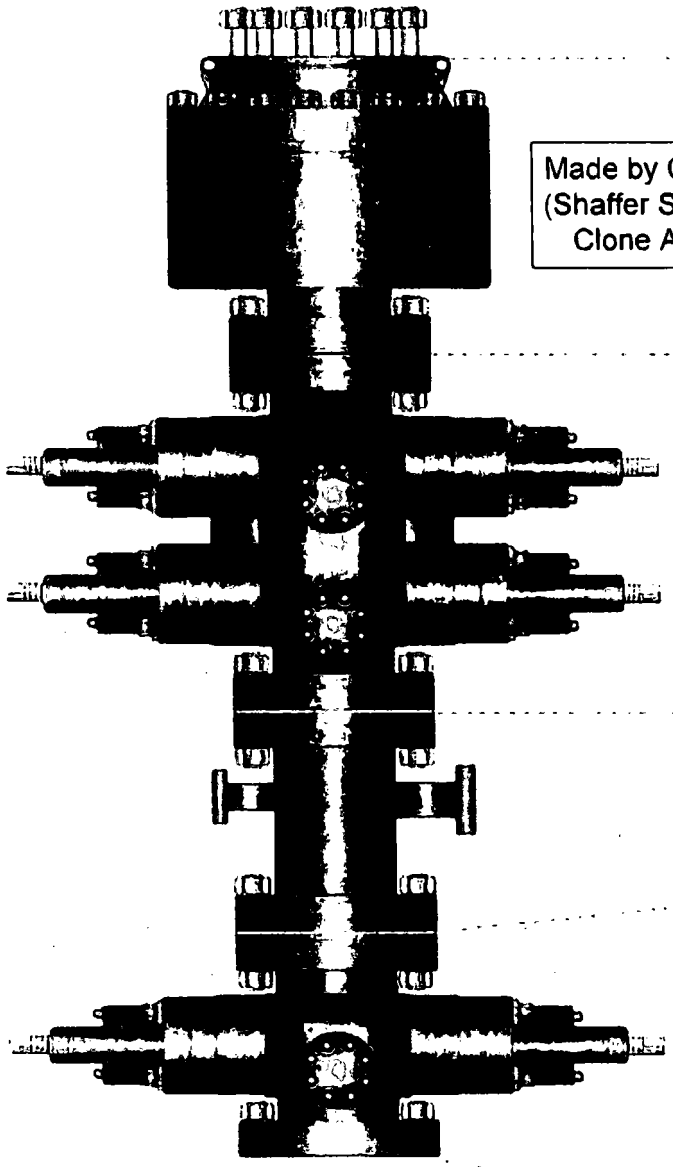
10M CHOKE ARRANGEMENT
RIG 297

DRAWING R0297-D.001.LAY.09

SHT 1 OF 1 REV. 02

PATTERSON-UTI
Well Control

RIG: 809



Made by Cameron
(Shaffer Spherical)
Clone Annular

PATTERSON-UTI # PS2-628
STYLE: New Shaffer Spherical
BORE 13 5/8" **PRESSURE** 5,000
HEIGHT: 48 ½" **WEIGHT:** 13,800 lbs

PATTERSON-UTI # PC2-128
STYLE: New Cameron Type U
BORE 13 5/8" **PRESSURE** 10,000
RAMS: TOP 5" Pipe **BTM** Blinds
HEIGHT: 66 5/8" **WEIGHT:** 24,000 lbs

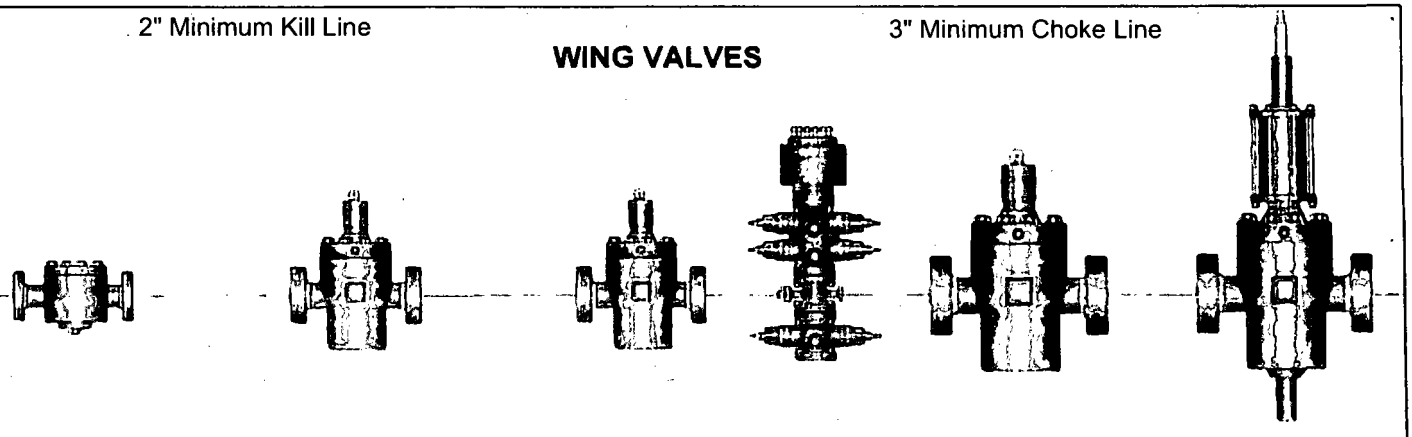
Length 40" **Outlets** 4" 10M
DSA 4" 10M x 2" 10M

PATTERSON-UTI # PC2-228
STYLE: New Cameron Type U
BORE 13 5/8" **PRESSURE** 10,000
RAMS: 5" Pipe
HEIGHT: 41 5/8" **WEIGHT:** 13,000 lbs

2" Minimum Kill Line

WING VALVES

3" Minimum Choke Line



2" Check Valve | 2" Manual Valve | 2" Manual Valve | 4" Manual Valve | 4" Hydraulic Valve

R809

March 10, 2015

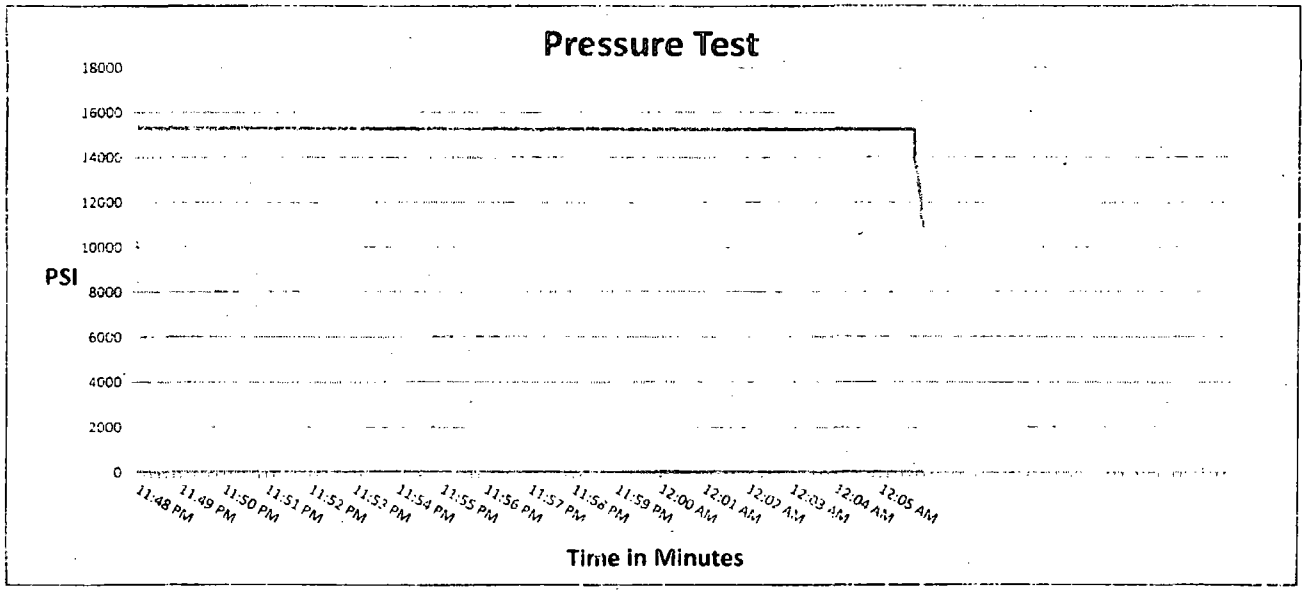
Midwest Hose & Specialty, Inc.

Internal Hydrostatic Test Graph

Customer: Patterson B&E

Pick Ticket #: 296283

Hose Specifications		Verification	
Hose Type	**Length**	**Type of Fitting**	**Coupling Method**
Mud	50'	2"1502	Swage
I.D.	**O.D.**	**Die Size**	**Final O.D.**
2"	3.47"	97MM	4.03"
Working Pressure	**Burst Pressure**	**Hose Serial #**	**Hose Assembly Serial #**
10000 PSI	Standard Safety Multiplier Applies	11839	296283



Test Pressure	Time Held at Test Pressure	Actual Burst Pressure	Peak Pressure
15000 PSI	17 3/4 Minutes		15361 PSI

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

Tested By: *Richard Davis*

Approved By: *Ryan Adams*

Midwest Hose
& Specialty, Inc.

Internal Hydrostatic Test Certificate

General Information		Hose Specifications	
Customer	PATTERSON B&E	Hose Assembly Type	Choke & Kill
MWH Sales Representative	AMY WHITE	Certification	API 7K/FSL Level 2
Date Assembled	3/10/2015	Hose Grade	MUD
Location Assembled	OKC	Hose Working Pressure	10000
Sales Order #	245805	Hose Lot # and Date Code	11839-11/14
Customer Purchase Order #	270590	Hose I.D. (Inches)	2"
Assembly Serial # (Pick Ticket #)	296283	Hose O.D. (Inches)	3.99"
Hose Assembly Length	50'	Armor (yes/no)	YES

Fittings

End A		End B	
Stem (Part and Revision #)	R2.0X32M1502	Stem (Part and Revision #)	RF2.0 32F1502
Stem (Heat #)	14104546	Stem (Heat #)	A144853
Ferrule (Part and Revision #)	RF2.0 10K	Ferrule (Part and Revision #)	RF2.0 10K
Ferrule (Heat #)	41044	Ferrule (Heat #)	41044
Connection . Flange Hammer Union Part		Connection (Part #)	
Connection (Heat #)		Connection (Heat #)	
Nut (Part #)	2" 1502 H2S	Nut (Part #)	
Nut (Heat #)		Nut (Heat #)	
Dies Used	97MM	Dies Used	97MM

Hydrostatic Test Requirements

Test Pressure (psi)	15,000	***Hose assembly was tested with ambient water temperature.***
Test Pressure Hold Time (minutes)	17 3/4	

Date Tested	Tested By	Approved By
3/10/2015		

Midwest Hose
& Specialty, inc.

Certificate of Conformity

Customer: **PATTERSON B&E**	*Customer P.O.#* **270590**
Sales Order # **245805**	*Date Assembled:* **3/10/2015**

Specifications

Hose Assembly Type:	**Choke & Kill**		
Assembly Serial #	**296283**	*Hose Lot # and Date Code*	**11839-11/14**
Hose Working Pressure (psi)	**10000**	*Test Pressure (psi)*	**15000**

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:

Approved By	***Date***
	3/19/2015

R 809 · Check & Kelly Hoses

December 24, 2014

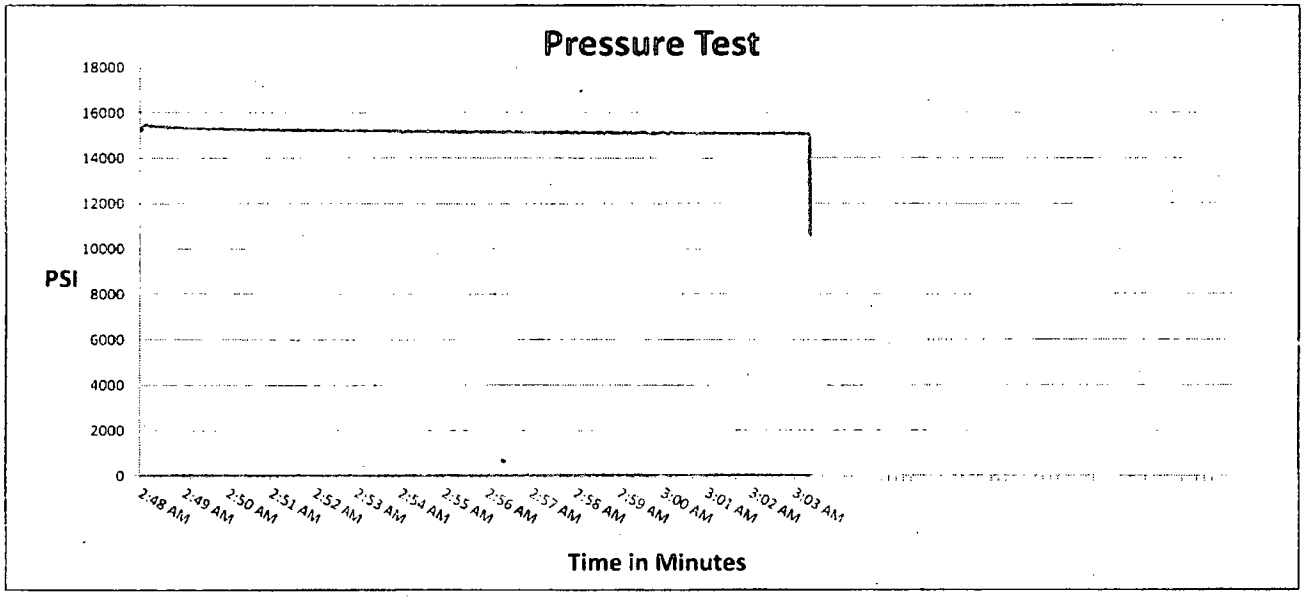
Midwest Hose & Specialty, Inc.

Internal Hydrostatic Test Graph

Customer: Patterson

Pick Ticket #: 286159

Hose Specifications		Verification	
Hose Type	**Length**	**Type of Fitting**	**Coupling Method**
Ck	50'	2" 1502	Swage
I.D.	**O.D.**	**Die Size**	**Final O.D.**
2"	3.55"	97MM	3.98"
Working Pressure	**Burst Pressure**	**Hose Serial #**	**Hose Assembly Serial #**
10000 PSI	Standard Safety Multiplier Applies	11784	286159



Test Pressure	Time Held at Test Pressure	Actual Burst Pressure	Peak Pressure
15000 PSI	15 1/4 Minutes		15410 PSI

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

Tested By: *Tyler Hill*

Approved By: *Ryan Adams*

Midwest Hose
& Specialty, Inc.

Internal Hydrostatic Test Certificate

General Information		Hose Specifications	
Customer	PATTERSON B&E	Hose Assembly Type	Choke & Kill
MWH Sales Representative	AMY WHITE	Certification	API 7K/FSL Level 2
Date Assembled	12/23/2014	Hose Grade	MUD
Location Assembled	OKC	Hose Working Pressure	10000
Sales Order #	237566	Hose Lot # and Date Code	11784-10/14
Customer Purchase Order #	261581	Hose I.D. (Inches)	2"
Assembly Serial # (Pick Ticket #)	286159	Hose O.D. (Inches)	4.00"
Hose Assembly Length	50'	Armor (yes/no)	YES

Fittings

End A		End B	
Stem (Part and Revision #)	R2.0X32M1502	Stem (Part and Revision #)	R2.0X32M1502
Stem (Heat #)	M14104546	Stem (Heat #)	M14101226
Ferrule (Part and Revision #)	RF2.0 10K	Ferrule (Part and Revision #)	RF2.0 10K
Ferrule (Heat #)	41044	Ferrule (Heat #)	41044
Connection . Flange Hammer Union Part	2"1502	Connection (Part #)	
Connection (Heat #)	2866	Connection (Heat #)	
Nut (Part #)		Nut (Part #)	
Nut (Heat #)		Nut (Heat #)	
Dies Used	97MM	Dies Used	97MM

Hydrostatic Test Requirements

Test Pressure (psi)	15,000	***Hose assembly was tested with ambient water temperature.***
Test Pressure Hold Time (minutes)	15 1/4	

Date Tested	Tested By	Approved By
12/24/2014	Tyler Hill	Ryan Adams

Midwest Hose
& Specialty, Inc.

Certificate of Conformity

Customer: **PATTERSON B&E**	*Customer P.O.#* **261581**
Sales Order # **237566**	*Date Assembled:* **12/23/2014**

Specifications

Hose Assembly Type:	**Choke & Kill**		
Assembly Serial #	**286159**	*Hose Lot # and Date Code*	**11784-10/14**
Hose Working Pressure (psi)	**10000**	*Test Pressure (psi)*	**15000**

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:

Approved By	***Date***
	12/29/2014

Midwest Hose
& Specialty, Inc.

Internal Hydrostatic Test Certificate

General Information		Hose Specifications	
Customer	PATTERSON B&E	Hose Assembly Type	Choke & Kill
MWH Sales Representative	AMY WHITE	Certification	API 7K/FSL Level 2
Date Assembled	3/10/2015	Hose Grade	MUD
Location Assembled	OKC	Hose Working Pressure	10000
Sales Order #	245805	Hose Lot # and Date Code	11839-11/14
Customer Purchase Order #	270590	Hose I.D. (Inches)	2"
Assembly Serial # (Pick Ticket #)	296283	Hose O.D. (Inches)	3.99"
Hose Assembly Length	50'	Armor (yes/no)	YES

Fittings			
End A		End B	
Stem (Part and Revision #)	R2.0X32M1502	Stem (Part and Revision #)	RF2.0 32F1502
Stem (Heat #)	14104546	Stem (Heat #)	A144853
Ferrule (Part and Revision #)	RF2.0 10K	Ferrule (Part and Revision #)	RF2.0 10K
Ferrule (Heat #)	41044	Ferrule (Heat #)	41044
Connection . Flange Hammer Union Part		Connection (Part #)	
Connection (Heat #)		Connection (Heat #)	
Nut (Part #)	2" 1502 H2S	Nut (Part #)	
Nut (Heat #)		Nut (Heat #)	
Dies Used	97MM	Dies Used	97MM

Hydrostatic Test Requirements		
Test Pressure (psi)	15,000	Hose assembly was tested with ambient water temperature.
Test Pressure Hold Time (minutes)	17 3/4	

Date Tested	Tested By	Approved By
3/10/2015		

Casing Design Criteria and Load Case Assumptions

Surface Casing

Collapse: DF_C=1.125

- Full Internal Evacuation: Collapse force equal to the mud gradient in which the casing will be run (0.43 psi/ft). The effects of axial load on collapse will be considered.
- Cementing: Collapse force equal to the gradient of planned cement slurries to planned depths and an internal force equal to mud gradient of displacement fluid (0.52 psi/ft).

Burst: DF_b=1.125

- Pressure Test: Casing test per Onshore Oil and Gas Order No. 2 with an external force equal to the mud gradient in which the casing will be run (0.43 psi/ft), which is a more conservative backup force than pore pressure.

Tensile: DF_t=1.8

- Overpull: A downward force of 100,000 lbs is applied at the shoe along with the weight of the casing string utilizing the effects of buoyancy (8.3 ppg).

Casing Design Criteria and Load Case Assumptions

Intermediate #1 Casing

Collapse: DF_C=1.125

- Full Internal Evacuation: Collapse force equal to the mud gradient in which the casing will be run (0.52 psi/ft). The effects of axial load on collapse will be considered.
- Cementing: Collapse force equal to the gradient of planned cement slurries to planned depths and an internal force equal to mud gradient of displacement fluid (0.43 psi/ft).

Burst: DF_b=1.125

- Pressure Test: Casing test per Onshore Oil and Gas Order No. 2 with an external force equal to the mud gradient in which the casing will be run (0.52 psi/ft), which is a more conservative backup force than pore pressure.
- Gas Kick Profile: Internal burst force at the shoe will be Fracture Pressure at that depth. Surface burst pressure will be fracture gradient at setting depth less a gas gradient to equivalent height of 50 bbl kick with Drill Pipe inside casing and mud gradient with which the next hole section will be run above that (0.47 psi/ft). External force will be equal to the mud gradient in which the casing will be run (0.52 psi/ft), which is a more conservative backup force than pore pressure.
- Fracture at Shoe with 1/3 BHP at Surface: Internal burst force at the shoe will be Fracture Pressure at setting depth. Internal burst force at surface will be 1/3 of pore pressure at setting depth. External force will be equal to the mud gradient in which the casing will be run (0.52 psi/ft) which is a more conservative backup force than pore pressure.

Tensile: DF_t=1.8

- Overpull: A downward force of 100,000 lbs is applied at the shoe along with the weight of the casing string utilizing the effects of buoyancy (10.0 ppg).

Casing Design Criteria and Load Case Assumptions

Production Casing

Collapse: DF_C=1.125

- Full Internal Evacuation: Collapse force equal to the mud gradient in which the casing will be run (0.47 psi/ft). The effects of axial load on collapse will be considered.
- Cementing: Collapse force equal to the gradient of planned cement slurries to planned depths and mud gradient in which the casing will be run above that (0.47 psi/ft) and an internal force equal to mud gradient of displacement fluid (0.43 psi/ft).

Burst: DF_b=1.125

- Pressure Test: 8000 psi casing test with an external force equal to the mud gradient in which the casing will be run (0.47 psi/ft), which is a more conservative backup force than pore pressure.
- Injection Down Casing: 9500 psi surface injection pressure plus an internal pressure gradient of 0.65 psi/ft with an external force equal to the mud gradient in which the casing will be run (0.47 psi/ft), which is a more conservative backup force than pore pressure.

Tensile: DF_t=1.8

- Overpull: A downward force of 100,000 lbs is applied at the shoe along with the weight of the casing string utilizing the effects of buoyancy (9.0 ppg).

A 10,000' 5000-psi BOP stack consisting of 3 rams with 2 pipe rams, 1 blind ram, and 1 annular preventer will be used below surface casing to TD. See attached BOP, choke manifold, co-flex hose, and speed head diagrams.

An accumulator complying with Onshore Order 2 requirements for the BOP stack pressure rating will be present. Rotating head will be installed as needed.

Pressure tests will be conducted before drilling out from under all casing strings. BOP will be inspected and operated as required in Onshore Order 2. Kelly cock and sub equipped with a full opening valve sized to fit the drill pipe and collars will be available on the rig floor in the open position.

A third party company will test the BOPs.

Surface casing will be pressure tested to 250 psi low and 2000 psi high. Intermediate casing pressure tests will be made to 250 psi low and 3000 psi high. Annular preventer will be tested to 250 psi low and 2500 psi high on the surface casing and tested to 250 psi low and 2500 psi high on the intermediate casing. In the case of running a speed head with landing mandrel for 9.625" casing, initial surface casing test pressures will be 250 psi low and 3000 psi high, with wellhead seals tested to 5000 psi once the 9.625" casing has been landed and cemented. Matador is requesting a variance to use a speed head. Speed head diameter range is 13.375" x 9.625" x 5.5" x 2.875".

Matador requests a variance to drill this well using a co-flex line between the BOP and choke manifold. Certification for proposed co-flex hose is attached. Manufacturer does not require the hose to be anchored. If the specific hose is not available, then one of equal or higher rating will be used.

4. CASING & CEMENT

All casing will be API and new. See attached casing assumption worksheet.

Hole O. D.	Set MD	Set TVD	Casing O. D.	Weight (lb/ft)	Grade	Joint	Collapse	Burst	Tension
20"	0' - 1600'	0' - 1600'	Surface 13.375"	54.5	J-55	BTC	1.125	1.125	1.8
12.25"	0' - 5400'	0' - 5392'	Inter. 9.625"	40	J-55	BTC	1.125	1.125	1.8

8.75"	0' - 15618'	0' – 10785'	Product. 5.5"	20	P-110	DWC/C	1.125	1.125	1.8

Casing Name	Type	Sacks	Yield	Cu. Ft.	Weight	Blend
Surface	Lead	1764	1.75	3087	13.5	Class C + 3% NaCl + LCM
	Tail	559	1.38	771	14.8	Class C + 5% NaCl + LCM
TOC = GL		100% Excess			Centralizers per Onshore Order 2	
Intermediate	Lead	1262	1.81	2284	13.5	Class C + Bentonite + 1% $CaCl_2$ + 8% NaCl + LCM
	Tail	490	1.38	676	14.8	Class C + 5% NaCl + LCM
TOC = GL		100% Excess			2 on btm jt, 1 on 2nd jt, 1 every 4th jt to GL	
Production	Lead	730	2.25	1642	11.5	TXI + Fluid Loss + Dispersant + Retarder + LCM
	Tail	1511	1.38	2085	13.2	TXI + Fluid Loss + Dispersant + Retarder + LCM
TOC = 4400'		35% Excess			2 on btm jt, 1 on 2nd jt, 1 every other jt to top of tail cement (1000' above TOC)	

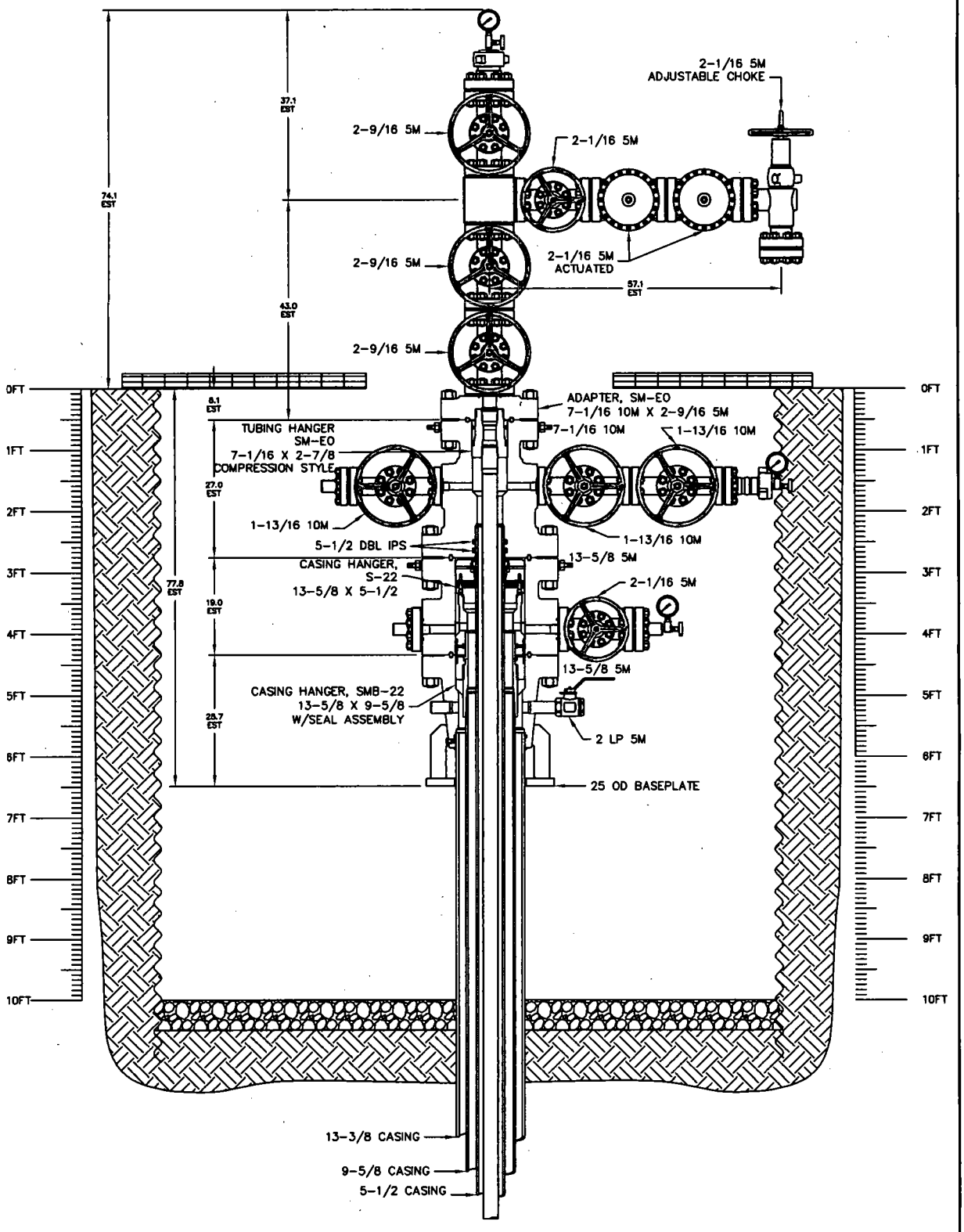
Matador requests the option to run a DV tool with annular packer as contingency in the intermediate section if lost circulation is encountered. If losses occur, then the DV tool with packer will be placed ≥100' above the loss zone to give the option to pump cement as either a single stage or two stage.

5. MUD PROGRAM

An electronic Pason mud monitoring system complying with Onshore Order 1 will be used. All necessary mud products (barite, bentonite, LCM) for weight addition and fluid loss control will be on location at all times. Mud program is subject to change due to hole conditions. A closed loop system will be used.

Type	Interval (MD)	lb/gal	Viscosity	Fluid Loss
fresh water spud	0' - 1600'	8.4	28	NC
brine water	1600' - 5400'	10.0	30-32	NC
fresh water & cut brine	5400' - 15618'	9.0	30-32	NC

MATADOR
MQ-436



NOTE:
DIMENSIONS SHOWN ON THIS DRAWING ARE ESTIMATES ONLY AND CAN VARY SIGNIFICANTLY DEPENDING ON RAW MATERIAL LENGTHS. NO GUARANTEE OF STACKUP HEIGHT IS IMPLIED. DIMENSIONS SHOWN SHOULD BE CONSIDERED FOR REFERENCE PURPOSES ONLY.

WEIR

5,000 PSI WELLHEAD & TREE ASSEMBLY
13-3/8 X 9-5/8 X 5-1/2 X 2-7/8

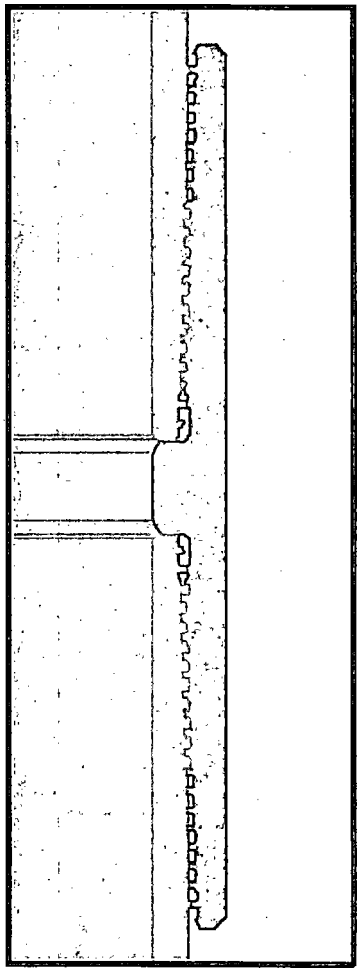
DRAWN BY:	SCALE	DATE	REV
RPL	1:10	23SEP16	
CHECKED BY:	DRAWING NO.		
APPROVED BY:	P-21629		

Technical Specifications

Connection Type:	Size(O.D.):	Weight (Wall):	Grade:
DWC/C-IS PLUS Casing	5-1/2 in	20.00 lb/ft (0.361 in)	VST P110 EC
standard			

	Material
VST P110 EC	Grade
125,000	Minimum Yield Strength (psi)
135,000	Minimum Ultimate Strength (psi)
	Pipe Dimensions
5.500	Nominal Pipe Body O.D. (in)
4.778	Nominal Pipe Body I.D.(in)
0.361	Nominal Wall Thickness (in)
20.00	Nominal Weight (lbs/ft)
19.83	Plain End Weight (lbs/ft)
5.828	Nominal Pipe Body Area (sq in)
	Pipe Body Performance Properties
729,000	Minimum Pipe Body Yield Strength (lbs)
12,090	Minimum Collapse Pressure (psi)
14,360	Minimum Internal Yield Pressure (psi)
13,100	Hydrostatic Test Pressure (psi)
	Connection Dimensions
6.300	Connection O.D. (in)
4.778	Connection I.D. (in)
4.653	Connection Drift Diameter (in)
4.13	Make-up Loss (in)
5.828	Critical Area (sq in)
100.0	Joint Efficiency (%)
	Connection Performance Properties
729,000	Joint Strength (lbs)
26,040	Reference String Length (ft) 1.4 Design Factor
728,000	API Joint Strength (lbs)
729,000	Compression Rating (lbs)
12,090	API Collapse Pressure Rating (psi)
14,360	API Internal Pressure Resistance (psi)
104.2	Maximum Uniaxial Bend Rating [degrees/100 ft]
	Appoximated Field End Torque Values
16,600	Minimum Final Torque (ft-lbs)
19,100	Maximum Final Torque (ft-lbs)
21,600	Connection Yield Torque (ft-lbs)

VAM USA
4424 W. Sam Houston Pkwy. Suite 150
Houston, TX 77041
Phone: 713-479-3200
Fax: 713-479-3234
E-mail: VAMUSAsales@vam-usa.com

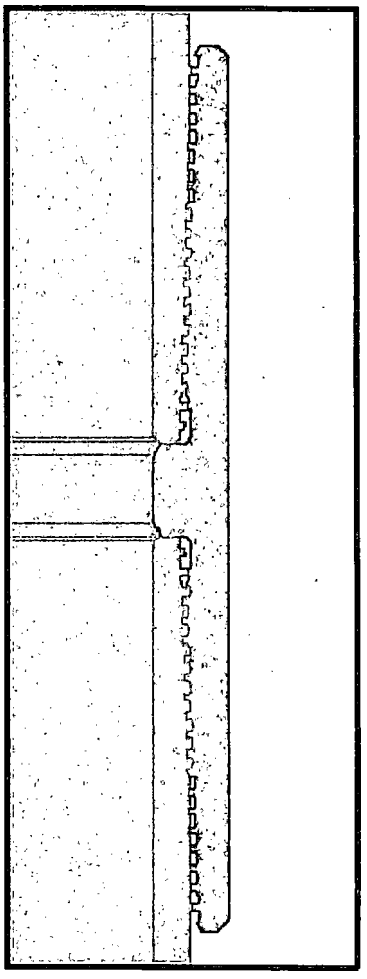


For detailed information on performance properties, refer to DWC Connection Data Notes on following page(s).

4/14/2015

DWC Connection Data Notes:

1. DWC connections are available with a seal ring (SR) option.
2. All standard DWC/C connections are interchangeable for a give pipe OD. DWC connections are interchangeable with DWC/C-SR connections of the same OD and wall.
3. Connection performance properties are based on nominal pipe body and connection dimensions.
4. DWC connection internal and external pressure resistance is calculated using the API rating for buttress connections. API Internal pressure resistance is calculated from formulas 31, 32, and 35 in the API Bulletin 5C3.
5. DWC joint strength is the minimum pipe body yield strength multiplied by the connection critical area.
6. API joint strength is for reference only. It is calculated from formulas 42 and 43 in the API Bulletin 5C3.
7. Bending efficiency is equal to the compression efficiency.
8. The torque values listed are recommended. The actual torque required may be affected by field conditions such as temperature, thread compound, speed of make-up, weather conditions, etc.
9. Connection yield torque is not to be exceeded.
10. Reference string length is calculated by dividing the joint strength by both the nominal weight in air and a design factor (DF) of 1.4. These values are offered for reference only and do not include load factors such as bending, buoyancy, temperature, load dynamics, etc.
11. DWC connections will accommodate API standard drift diameters.



4/14/2015

Matador requests the option to run a DV tool with annular packer as contingency in the intermediate 1 section on 9-5/8" casing if lost circulation is encountered. If losses occur the DV tool with packer will be placed at least 100' above loss zone to give the option to pump cement as either a single stage or two stage.

Matador DV Tool Specifications

Example:

Assuming DV tool set at 4500' MD but if the setting depth changes, cement volumes will be adjusted proportionately.

Stage 1:

Lead	1262	1.81	13.5	Class C + Bentonite + 1% CaCL2 + 8% NaCl + LCM
Tail	490	1.38	14.8	Class C + 5% NaCl + LCM
100% excess, TOC = 0' MD				

Stage 2:

Lead	1324	1.81	13.5	Class C + Bentonite + 1% CaCL2 + 8% NaCl + LCM
100% excess, TOC = 0' MD				

APD ID: 10400015169 **Submission Date:** 06/16/2017

Operator Name: MATADOR PRODUCTION COMPANY

Well Name: VERNA RAE FEDERAL COM **Well Number:** 134H

Well Type: OIL WELL **Well Work Type:** Drill

Highlighted data reflects the most recent changes

Show Final Text

Section 1 - Existing Roads

Will existing roads be used? YES

Existing Road Map:

VernaRae_134H_Road_Map_06-15-2017.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? YES

New Road Map:

VernaRae_134H_Road_Map_06-15-2017.pdf

New road type: RESOURCE

Length: 629.25 Feet **Width (ft.):** 30

Max slope (%): 0 **Max grade (%):** 3

Army Corp of Engineers (ACOE) permit required? NO

ACOE Permit Number(s):

New road travel width: 14

New road access erosion control: Crown & ditch, surface with caliche

New road access plan or profile prepared? NO

New road access plan attachment:

Access road engineering design? NO

Access road engineering design attachment:

Operator Name: MATADOR PRODUCTION COMPANY

Well Name: VERNA RAE FEDERAL COM **Well Number:** 134H

Access surfacing type: OTHER

Access topsoil source: ONSITE

Access surfacing type description: Caliche

Access onsite topsoil source depth: 6

Offsite topsoil source description:

Onsite topsoil removal process: grader

Access other construction information:

Access miscellaneous information:

Number of access turnouts: **Access turnout map:**

Drainage Control

New road drainage crossing: OTHER

Drainage Control comments: No drainage crossings needed.

Road Drainage Control Structures (DCS) description: Crown & ditch, no culverts needed.

Road Drainage Control Structures (DCS) attachment:

Access Additional Attachments

Additional Attachment(s):

Section 3 - Location of Existing Wells

Existing Wells Map? YES

Attach Well map:

VernaRae_134H_Well_Map_06-15-2017.pdf

Existing Wells description:

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

Submit or defer a Proposed Production Facilities plan? SUBMIT

Production Facilities description:

Production Facilities map:

VernaRae_134H_Production_Diagram_06-15-2017.pdf

Section 5 - Location and Types of Water Supply

Water Source Table

Operator Name: MATADOR PRODUCTION COMPANY

Well Name: VERNA RAE FEDERAL COM **Well Number:** 134H

Water source use type: DUST CONTROL, STIMULATION **Water source type:** GW WELL

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:

VernaRae_134H_Water_Source_Map_06-15-2017.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: MATADOR PRODUCTION COMPANY

Well Name: VERNA RAE FEDERAL COM **Well Number:** 134H

Section 6 - Construction Materials

Construction Materials description: NM One Call (811) will be notified before construction starts. Top 6" of soil and brush will be stockpiled north of the pad. V-door will face south. Closed loop drilling system will be used. Caliche will be hauled from existing caliche pits on private land. Klein pit is in SWNW 27-19S-35E. Berry pit is in E2NE4 35-20s-34e.
Construction Materials source location attachment:

Section 7 - Methods for Handling Waste

Waste type: DRILLING

Waste content description: cuttings and mud

Amount of waste: 15000 barrels

Waste disposal frequency : Daily

Safe containment description: steel tanks

Safe containmant attachment:

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

Disposal location description: Halfway, NM

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 Steel tanks on pad

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:

VernaRae_134H_Well_Site_Layout_06-15-2017.pdf

Comments:

Section 10 - Plans for Surface Reclamation

Type of disturbance: New Surface Disturbance

Multiple Well Pad Name: VERNA RAE

Multiple Well Pad Number: SLOT 3

Recontouring attachment:

VernaRae_134H_Recontour_Plat_06-15-2017.PDF

VernaRae_134H_Interim_Reclamation_Diagram_20171023103126.PDF

Drainage/Erosion control construction: Surface with caliche

Drainage/Erosion control reclamation: Disturbed areas will be contoured to match pre-construction grades. Soil and brush will be evenly spread over disturbed areas and harrowed on the contour. Disturbed areas will be seeded in accordance with the surface owner's requirements.

Wellpad long term disturbance (acres): 3.15

Wellpad short term disturbance (acres): 3.57

Access road long term disturbance (acres): 0.43

Access road short term disturbance (acres): 0.43

Pipeline long term disturbance (acres): 0

Pipeline short term disturbance (acres): 0

Other long term disturbance (acres): 0

Other short term disturbance (acres): 0.49

Total long term disturbance: 3.58

Total short term disturbance: 4.49

Reconstruction method: Within 7 days disturbed areas will be contoured to match pre-construction grades. Soil and brush will be evenly spread over disturbed areas and harrowed on the contour with a grader. Disturbed areas will be seeded in accordance with the surface owner's requirements.
Topsoil redistribution: Soil will be evenly spread over disturbed areas

Soil treatment: No soil treatment planned, site will be revegetated in accordance with the surface owner's requirements.

Operator Name: MATADOR PRODUCTION COMPANY

Well Name: VERNA RAE FEDERAL COM **Well Number:** 134H

Existing Vegetation at the well pad:

Existing Vegetation at the well pad attachment:

Existing Vegetation Community at the road:

Existing Vegetation Community at the road attachment:

Existing Vegetation Community at the pipeline:

Existing Vegetation Community at the pipeline attachment:

Existing Vegetation Community at other disturbances:

Existing Vegetation Community at other disturbances attachment:

Non native seed used?

Non native seed description:

Seedling transplant description:

Will seedlings be transplanted for this project?

Seedling transplant description attachment:

Will seed be harvested for use in site reclamation?

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:

Seed BMP:

Seed method:

Existing invasive species? NO

Existing invasive species treatment description:

Existing invasive species treatment attachment:

Weed treatment plan description: Noxious weeds will be controlled.

Weed treatment plan attachment:

Monitoring plan description: On pumper visits.

Monitoring plan attachment:

Success standards: To landowner's specifications.

Pit closure description: N/A (closed loop)

Pit closure attachment:

Section 11 - Surface Ownership

Disturbance type: WELL PAD

Describe:

Surface Owner: PRIVATE OWNERSHIP

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:

Operator Name: MATADOR PRODUCTION COMPANY

Well Name: VERNA RAE FEDERAL COM **Well Number:** 134H

Other Local Office:

USFS Region:

USFS Forest/Grassland: **USFS Ranger District:**

Fee Owner: Larry Hughes **Fee Owner Address:** HC 69 Box 57 Monument NM 88265

Phone: (575)263-7602 **Email:**

Surface use plan certification: NO

Surface use plan certification document:

Surface access agreement or bond: Agreement

Surface Access Agreement Need description: Matador Resources Company has a private surface owner agreement with Larry Hughes (HC 69 Box 57, Monument NM 88265) for the Verna Rae Fed Com road in SESE Sec. 31, T. 19 S., R. 34 E. and the Verna Rae Fed Com slot 3 well site, road, and power line in Section 6, T. 20 S., R. 34 E., Lea County, NM. Matador Resources Company will file an Application for Right-Of-Way Easement with the NM State Land Office (PO Box 1148, Santa Fe NM 87504) for road access across S2S2 32-19s-34e. Their phone number is (505) 827-5728.

Surface Access Bond BLM or Forest Service: BLM

BLM Surface Access Bond number:

USFS Surface access bond number:

Section 12 - Other Information

Right of Way needed? NO **Use APD as ROW?**

ROW Type(s):

ROW Applications

SUPO Additional Information: Deficiency Letter of 10/3/17 requested: 1) Cut & fill diagram - see Recontour Plat in reclamation section as originally attached; 2) Surface Use Agreement - see attachment in Other SUPO attachements.

Use a previously conducted onsite? YES

Previous Onsite information: On site inspection was held with Vance Wolf, Cassie Brooks, and Bob Ballard (all BLM) on April 3, 2017.

Other SUPO Attachment

VernaRae_134H_General_SUPO_06-15-2017.pdf

VernaRae_134H_Surface_Use_Agreement_20171005100120.pdf

Section 1 - General

Would you like to address long-term produced water disposal? NO

Section 2 - Lined Pits

Would you like to utilize Lined Pit PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner:

PWD disturbance (acres):

Lined pit PWD on or off channel:

Lined pit PWD discharge volume (bbl/day):

Lined pit specifications:

Pit liner description:

Pit liner manufacturers information:

Precipitated solids disposal:

Decribe precipitated solids disposal:

Precipitated solids disposal permit:

Lined pit precipitated solids disposal schedule:

Lined pit precipitated solids disposal schedule attachment:

Lined pit reclamation description:

Lined pit reclamation attachment:

Leak detection system description:

Leak detection system attachment:

Lined pit Monitor description:

Lined pit Monitor attachment:

Lined pit: do you have a reclamation bond for the pit?

Is the reclamation bond a rider under the BLM bond?

Lined pit bond number:

Lined pit bond amount:

Additional bond information attachment:

Section 3 - Unlined Pits

Would you like to utilize Unlined Pit PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner: **PWD disturbance (acres):**

Unlined pit PWD on or off channel:

Unlined pit PWD discharge volume (bbl/day):

Unlined pit specifications:

Precipitated solids disposal:

Decribe precipitated solids disposal:

Precipitated solids disposal permit:

Unlined pit precipitated solids disposal schedule:

Unlined pit precipitated solids disposal schedule attachment:

Unlined pit reclamation description:

Unlined pit reclamation attachment:

Unlined pit Monitor description:

Unlined pit Monitor attachment:

Do you propose to put the produced water to beneficial use?

Beneficial use user confirmation:

Estimated depth of the shallowest aquifer (feet):

Does the produced water have an annual average Total Dissolved Solids (TDS) concentration equal to or less than that of the existing water to be protected?

TDS lab results:

Geologic and hydrologic evidence:

State authorization:

Unlined Produced Water Pit Estimated percolation:

Unlined pit: do you have a reclamation bond for the pit?

Is the reclamation bond a rider under the BLM bond?

Unlined pit bond number:

Unlined pit bond amount:

Additional bond information attachment:

Section 4 - Injection

Would you like to utilize Injection PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner: **PWD disturbance (acres):**

Injection PWD discharge volume (bbl/day):

Injection well mineral owner:

Injection well type:

Injection well number: **Injection well name:**

Assigned injection well API number? **Injection well API number:**

Injection well new surface disturbance (acres):

Minerals protection information:

Mineral protection attachment:

Underground Injection Control (UIC) Permit?

UIC Permit attachment:

Section 5 - Surface Discharge

Would you like to utilize Surface Discharge PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner: **PWD disturbance (acres):**

Surface discharge PWD discharge volume (bbl/day):

Surface Discharge NPDES Permit?

Surface Discharge NPDES Permit attachment:

Surface Discharge site facilities information:

Surface discharge site facilities map:

Section 6 - Other

Would you like to utilize Other PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner: **PWD disturbance (acres):**

Other PWD discharge volume (bbl/day):

Other PWD type description:

Other PWD type attachment:

Have other regulatory requirements been met?

Other regulatory requirements attachment:

AFMSS

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

Bond Info Data Report

12/21/2017

Bond Information

Federal/Indian APD: FED

BLM Bond number: NMB001079

BIA Bond number:

Do you have a reclamation bond? NO

Is the reclamation bond a rider under the BLM bond?

Is the reclamation bond BLM or Forest Service?

BLM reclamation bond number:

Forest Service reclamation bond number:

Forest Service reclamation bond attachment:

Reclamation bond number:

Reclamation bond amount:

Reclamation bond rider amount:

Additional reclamation bond information attachment:

AFMSS

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

Operator Certification Data Report

12/21/2017

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: Brian Wood **Signed on:** 06/16/2017

Title: President

Street Address: 37 Verano Loop

City: Santa Fe **State:** NM **Zip:** 87508

Phone: (505)466-8120

Email address: afmss@permitswest.com

Field Representative

Representative Name:

Street Address:

City: **State:** **Zip:**

Phone:

Email address:

June 12, 2017

To Who it May Concern:

Matador Resources Company has a private surface owner agreement with Larry Hughes (HC 69 Box 57, Monument NM 88265) for the Verna Rae Fed Com road in SESE Sec. 31, T. 19 S., R. 34 E. and the Verna Rae Fed Com 134H well site, road, and power line in Lots 1 & 2 of Section 6, T. 20 S., R. 34 E., Lea County, NM. His phone number is (575) 263-7602.

Matador Resources Company will file an Application for Right-Of-Way Easement with the NM State Land Office (PO Box 1148, Santa Fe NM 87504) for road access across S2S2 32-19s-34e. Their phone number is (505) 827-5728.

Brian Wood